




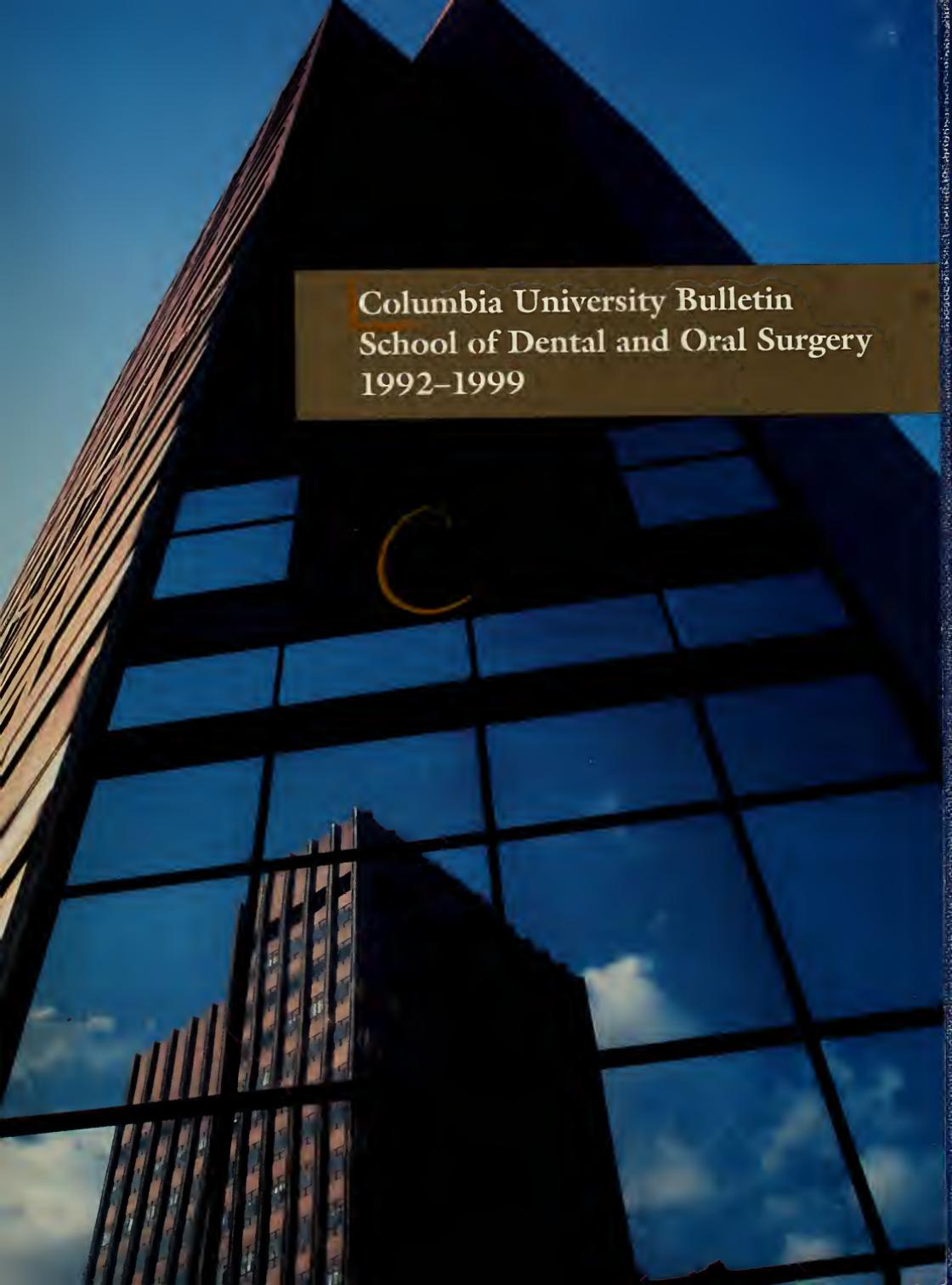
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Columbia University Bulletin
School of Dental and Oral Surgery
1992-1999

Serial
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1992-1999
Spec-611
H-611

Mailing address:

Office of Admissions
School of Dental and Oral Surgery
Columbia University
630 West 168th Street
New York, New York 10032

**Postmaster: Send change of
address to Columbia
University Bulletin, School of
Dental and Oral Surgery,
630 West 168th Street, New
York, N.Y. 10032**

Columbia University Bulletin
(USPS 123820)
Volume 29, Number 4
July 28, 1995

Published once a month in May,
June, and September; twice a
month in July and August, for
seven consecutive issues, by
Columbia University, New York,
N.Y. 10027. Second class postage
paid at New York, N.Y.

**Columbia
University
Bulletin**

**School of Dental
and Oral Surgery
1992-1999**

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The School of Dental and Oral Surgery

The School traces its origin to 1852, when the New York State legislature chartered the New York College of Dentistry, later renamed the New York College of Dental and Oral Surgery. In 1916 Columbia University, having recognized dentistry as an integral and important part of the health sciences and a true university discipline, established its own school of dental education. Shortly thereafter, the new Columbia University dental school absorbed both the New York Post-graduate School of Dentistry and the New York School of Dental Hygiene. In 1923 it was joined by the New York College of Dental and Oral Surgery to form the present School of Dental and Oral Surgery of Columbia University, thus completing a series of unique and complex mergers.

The institution has remained a leading force in dental education and research ever since its establishment. In the early 1920s Professor William J. Gies of the Columbia Biochemistry Department established the International Association for Dental Research, the first organization devoted exclusively to research in the field of dentistry. In 1926 Professor Gies prepared the report *Dental Education in the United States and Canada* for the Carnegie Foundation for the Advancement of Teaching. This was a major critique of dental education in the United States, and its publication resulted in the acceptance by dental schools throughout the country of the basic educational policies and objectives developed at Columbia University.

DENTISTRY: PRESENT AND FUTURE

In recent decades, complex societal and governmental forces have had an increasing influence on dental education and the practice of dentistry in the United States. Government has come to view health services in the same light as public utilities, and members of the public have come to view themselves as active participants in the health-care system rather than as passive recipients of treatment.

Through advances in research and through the evolution of newer modes of practice, the field of dentistry has developed the capacity to deliver quality dental care to large numbers of individuals. A yet unsolved problem is how to devise ways of using this great capacity to provide care at a reasonable cost to a greater proportion of our population, including those who do not now have adequate and easy access to dental care because of poverty or special problems such as handicaps, age infirmities, or remoteness of location.

Just as the practice of dentistry is undergoing considerable change, dental education similarly faces a number of challenges for the future. The School of Dental and Oral Surgery is responding to these challenges through the development of new instructional programs that emphasize the importance of medical preparation and that offer the student flexibility in educational options.

A necessary mission of the School is to prepare dental students to face a professional future in which many changes may be anticipated. Students completing the

D.D.S. degree within the next few years will enter a professional world in which traditional health-care systems and the old values are still strong. They must be able to function successfully and contribute to some existing career role in that world, but it is equally important for today's students to recognize that during their active professional life span of approximately forty years the health-care system, including dentistry, will change substantially.

Changes in the economics of dental health care may also be expected from scientific research aimed at reducing the prevalence of dental caries and other dental diseases. The need for well-trained dentists in this country will remain strong, however, as the growing population of elderly persons in the United States who require care will place a new set of demands on the dental care delivery system.

It is clear that future graduates in dentistry must be provided with an education that will permit them to adapt to a changing way of life and a changing demography. The new dentist must have the commitment, the capacity, and the ability to continue to learn during a long and constantly changing professional lifetime. These are attitudes and skills that must be fostered in the dental educational process.

THE MISSION OF COLUMBIA UNIVERSITY SCHOOL OF DENTAL AND ORAL SURGERY

The mission Columbia University School of Dental and Oral Surgery was established in 1917, when the School became incorporated into Columbia University. The School's mission has evolved into a tripartite commitment to education, patient care, and research.

Education

- To prepare students for careers in dentistry by providing them with a strong education; a curriculum that emphasizes the biomedical sciences and that prepares graduates to practice general dentistry or to pursue advanced training in hospitals and dental schools. This goal reinforces the vision of the relationship of dentistry to medicine as enunciated by William J. Gies in the 1926 Carnegie Commission Report.
- To incorporate within the curriculum opportunities in such diverse areas as public health, informatics, and biomedical research, thereby enriching the education of those who will practice general dentistry and revealing new career options for interested students.
- To prepare graduates with an understanding of the social, economic, societal, and ethical aspects of the profession, as well as the historical foundations of dentistry.
- To instill in students the capacity and ability as well as the commitment to continue to learn during their professional lifetime.
- To support and strengthen advanced dental education programs in general dentistry, the dental specialties, and the dental sciences. *[Recognizing the value to the public and the dental specialties, SDOS established the first formal specialty education program in orthodontics in the 1920s. SDOS went on to establish programs in periodontics, endodontics, oral/maxillofacial surgery, prosthodontics, pediatric dentistry, and most recently the School expanded edu-*

cation opportunities in general dentistry by establishing new advanced programs.]

Patient Care

- To view patient care as a primary SDOS commitment and activity along with education and research and in doing so to provide a rich and diverse clinical education experience for its students.
- To bring clinical services to a wide range of underserved and minority patients in northern Manhattan. *[As part of the Columbia-Presbyterian Medical Center since 1928, the School provides general dentistry, oral surgery, pediatric dentistry, orthodontics, and other clinic services to many members of the community.]*

Research

- To encourage and support all forms of academic research efforts that have a direct impact on improving oral health. Research, be it basic science, clinical or applied, is the mechanism available to expand our existing knowledge. Dentistry has always been, and continues to be, an evolving discipline whose clinical foundations are based on research. *[For example, recent major research advances have been pioneered by dental researchers in connective tissue biochemistry (structure of the collagen molecule), immunology (chronic inflammatory processes), developmental biology (genetically inherited disorders) and materials science (implantology).]*
- To foster faculty and student participation in research and to train students in current research methodologies.
- To understand the role research must play to provide a rationale and basis for the highest level of care in an environment of changing economic and social needs. *[Furthermore, particular emphasis should be placed on improving the oral health care of the community served by SDOS and its affiliated institutions.]*

CURRICULUM

Many departments of the University contribute to and collaborate in the education of dental and postdoctoral students, assuring them a broad foundation for sound professional development. The guiding educational policy of Columbia University is the pursuit of excellence, and the primary goal of the School of Dental and Oral Surgery is the preparation of graduates equipped to fulfill their obligations to the individual, to society, and to the profession.

The University, recognizing the need for greater emphasis on the prevention of dental disease, constantly strives to revise the academic program. The curriculum is designed to increase a student's appreciation for the conceptual basis of dentistry. Adequate preparation for the demands of dentistry requires an understanding of broad biological principles integrated with a continually evolving body of scientific information in clinical dentistry and basic dental research. Predoctoral students, as directed observers, are exposed to a full spectrum of dental problems. They are then introduced to surgical and manipulative procedures as well as to methods of diagnosis and the prevention of dis-

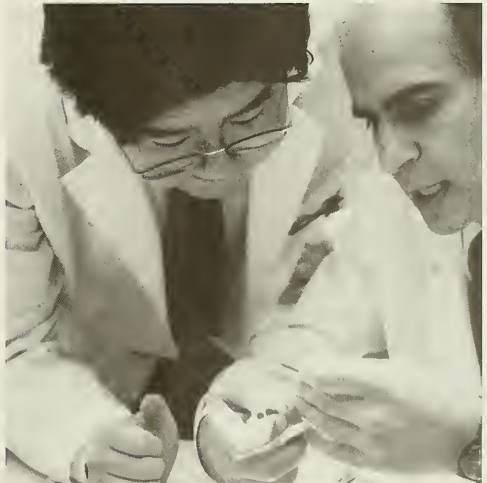
ease. Emphasis is on the close relationship between health and disease, both systemic and oral; on systemic aberrations that affect oral structures; on diseases of the face and mouth that may affect other organ systems; and on oral health as an essential component in total health.

Clinical training is broad in scope. It is designed to produce competence in the recognition of oral disease and disorders, stress the essential role of prevention in the control of oral disease, establish the concept of maintaining oral structures in optimal health, and develop skills in the planning and rendering of treatment.

The approach to clinical training is innovative and effective. Rather than a standardized clinical experience, a modular system permits the student to work at his/her own pace, taking the time needed to master a particular technique before moving on. The School has adapted the mentor model, so that students work side by side with a faculty member who is there to demonstrate techniques, serve as a preceptor, and provide individual instruction. The transition from the laboratory to patient care is made more effective and easier by the clinical simulation laboratory, a dental operatory area with mannikins.

A curriculum must be considered as only the initial framework for a student's lifetime participation in the profession of dentistry. To this end, the curriculum cultivates in students habits of independent thought and scholarship and encourages the continual evaluation of new knowledge. Attainment of professional competence and future development are encouraged by fostering the spirit of inquiry, and the School stresses the application of scientific methods and student participation in research.

Knowledge of the processes of human growth and development and of the prevention of disease and abnormality has resulted in an extensive reduction in infant and child mortality, and in a marked increase in the life span of the individual. In dentistry, prevention of dental and oral disease and disorder provides an opportunity for children to reach adulthood with complete, healthy dentitions. The increased life span of Americans, on the other hand, presents many physiological, pathological, and psychological



problems that are peculiar to the aged and must be considered when rendering dental treatment to elderly patients. The School has therefore developed a comprehensive program to train students in geriatric dentistry. Individuals with medical, neurological, and other handicaps also present special problems, and they have been able to receive dental treatment since the establishment of special facilities in the School such as the Treatment of the Handicapped Clinic.

The University recognizes that accomplishing the objectives of its dental education program requires the selection of students with superior abilities and academic qualifications, the acquisition and maintenance of an excellent staff, and the constant pursuit of knowledge through an active and diversified educational and research program. Conscious of these needs, the School selects its students with care and maintains small classes with a favorable ratio of staff to students that permits individual instruction and a stimulating relationship between student and instructor. Through the years the School has had a distinguished staff that has demonstrated accomplishment in educational research and professional leadership, and continues to prepare students for the expanding professional responsibilities of dentistry and the prevention of dental disease.

THE STUDY OF DENTISTRY IN NEW YORK CITY

New York City offers an extremely advantageous setting for the study of dentistry. Many of the most talented dental professionals of the nation and of the world maintain practices in New York City, and there are opportunities for students to visit private offices, clinics, and hospital dental services located throughout the city. In addition, the professional dental resources of the city provide students with exposure to leading authorities in every field of dentistry, many of whom serve on the Faculty of the School.

At the same time, Columbia students have opportunities for an unusually wide choice of cultural and artistic activities for which New York City is well known. Museums, theatres, opera houses, concert halls, and cinemas provide almost unlimited entertainment possibilities. For those interested in pursuing educational courses in addition to dentistry, Columbia University and numerous other academic centers in the city offer many opportunities for extracurricular learning.

PROGRAMS OF STUDY

D.D.S. Program

The School offers basic science courses to combined classes of dental, medical, and graduate students in the form of a "core" program. During the first year, the dental student takes primarily a series of basic science courses, including the newly developed course, *Sciences basic to the practice of dentistry*. This offering integrates material previously found in the courses, *Biochemistry*, *Cell biology of tissues and organs*, *Human genetics* and *Human physiology*. Other courses which deal with normal human biology are



The Plaza Hotel: A New York landmark.

Human clinical anatomy, *Human development*, and *Neural science*, as well as *Introduction to dentistry*, *Dental anatomy and occlusion*, *Oral histology: genetics and development*, and *Stress management*.

The second year deals primarily with abnormal human biology. The principal basic science series is a fully coordinated grouping of *Pathology*, *Applied pathophysiology*, and *Pharmacology*. These basic science courses are bridged into clinical dentistry with *Physical diagnosis*, which has both didactic and clinical components. *Oral infectious diseases*, *Periodontics*, *Oral radiology*, *Introduction to the patient*, and the entire array of preclinical dental sciences complete the second year.

Area of Concentration Program

In order to broaden the experience of students planning careers in general dentistry, the School has developed a comprehensive program, the "Areas of Concentration," which each student must take. Students select a series of educational offerings starting in the second year of the curriculum. The program offers in-depth educational experiences in areas not ordinarily covered in the regular curriculum. The offerings might eventually include clinical or seminar courses in the dental school, as well as courses in other schools of the University, such as the School of Public Health, the Business School, or Teachers College.

On entering the Area of Concentration Program, the second-year student selects one of five general categories: Advanced Clinical Dentistry, Research, Comprehensive General Dentistry, Oral Medicine/Oral Pathology, or Hospital Dentistry. The specialized tracks within these categories include, among other programs, periodontics, prosthodontics, pediatric dentistry-behavioral science, practice management, oral radiology, and geriatric dentistry.

Students will have an opportunity to begin their individual area of concentration programs during the third year, selecting from more than 15 elective "tracks" that include radiology, oral pathology and medicine, research, pediatric dentistry, geriatric dentistry, and advanced clinical dentistry, among others. Joint degree tracks (combined D.D.S.-Master of Public Health, for example) are available for students who choose to broaden their educational experience beyond dentistry.

The third year is predominantly clinical, with training in all phases of dentistry. Students are assigned to small group practices in which they begin to practice clinical dentistry under close preceptor supervision, working alongside postdoctoral fellows who are treating more complex problems.

A highlight of the third year is the one-month rotation that all students spend off-campus at an affiliated hospital. This extramural month is devoted to reinforcing skills in physical evaluation and diagnosis and in gaining experience in hospital oral and maxillofacial procedure. In addition, a substantial portion of curriculum time is available for students to continue with the area of concentration "track" that has been selected.

The fourth year remains the major clinical dentistry year, with students assuming the responsibility for rendering comprehensive dental care to a practice panel of patients assigned to them while completing studies in the chosen area of concentration track. A unique feature of this year is the one-day-per-week general practice rotation taken with our faculty at one of our sixteen affiliated hospitals. There the students have experiences with patient populations not available at our Vanderbilt Clinic site.

Throughout the entire curriculum an effort is made to interrelate the different phases of dental learning by means of correlation seminars and clinics in which the various departments and divisions cooperate in discussions and demonstrations that treat the study of dentistry as a unit rather than a series of isolated branches of learning. At the same time an attempt is made to individualize instruction and to place responsibility as far as practicable upon the student for his or her own training.

Voluntary participation in research projects of the student's choosing and in programs under the guidance of members of the faculty is earnestly encouraged. Members of the William Jarvie Society for Dental Research, the predoctoral research and honor society, undertake individual and team projects under the direction of members of the faculty. Lectures on the principles and practice of research are provided and, in addition, students assist in the execution of studies being pursued by faculty members. A limited number of student research fellowships are available for summer work under the direction of the staff. The scope of student research includes critical reviews of the literature, clinical studies in the techniques of the various disciplines of dentistry, and the evaluation of newer therapeutic agents and dental materials. Work in the basic sciences is encouraged. For a complete description of this program, see *The D.D.S. Program*, below.

Postdoctoral Programs

The School is authorized to grant certificates of training in the specialties of dentistry. Programs for the certificate of training include advanced study in the clinical and basic sci-

ences of dentistry. At present, programs are offered to qualified graduates in dentistry who wish to prepare for specialization in endodontics, orthodontics, pediatric dentistry, periodontics, and prosthodontics. These programs are described in detail under *Postdoctoral Programs in Dental Specialties*. For a description of the combined postdoctoral M.A. degree program, see below.

Continuing Education

Consistent with the belief that a lifetime of learning is necessary for continued competence in the health professions and that dental education must be a continuum that extends throughout one's professional career, the School of Dental and Oral Surgery maintains a program of continuing education conferences and courses of varying lengths on diverse subjects. They are given throughout the academic year and are announced by special brochures, notices in journals, and special mailings.

Courses may range in length from one day to one week or may meet weekly for an entire term. They are designed to enable the practitioner to review and continue his or her educational experience in fields where research and its clinical application present constantly changing concepts of prevention, diagnosis, and treatment.

A number of courses among those described under *The D.D.S. Program and Postdoctoral Programs in Dental Specialties* are offered as Continuing Education courses. These courses are available for attendance by nonmatriculated practitioners and other professionals through the Office of Continuing Education and are described in periodic Continuing Education brochures and announcements.

SPECIAL COURSES FOR FOREIGN DENTISTS AND VISITING SCHOLARS

Qualified exchange students are offered the opportunity for guided study, attendance, and observation of clinical and classroom education under the direction of a faculty member for variable periods of the school year not necessarily corresponding to regular academic intervals. Faculty members of other institutions may be granted visiting scholar privileges, which include auditing clinic and classroom courses (as approved by the course instructor), attending lectures, and participating (with the approval of the appropriate faculty member) in seminars.

This program is offered without credit. A special fee is determined after consultation with the director of Continuing Education, depending on the courses to be attended and the length of time to be spent in attendance. No official records of attendance are kept, and no transcript certifying attendance or work undertaken is provided by the registrar. Arrangements for enrollment are made with the director of Continuing Education.

Courses Leading to the Degree of Doctor of Philosophy

Graduation from accredited dental schools under the present curriculum of four academic years preceded by three acceptable predoctoral college years is considered by the Graduate School of Arts and Sciences of Columbia University to meet the general requirements for admission.

There are additional admission requirements in certain departments. A student who is accepted by the Graduate School as a candidate for the degree of Doctor of Philosophy and who holds the Doctor of Dental Surgery degree from Columbia University may, with the consent of the Dean, offer the work done for the professional degree in lieu of points toward the fulfillment of the residence requirement for the academic degree. For further information, see the bulletin of the Graduate School of Arts and Sciences, which can be obtained by writing to the Graduate School of Arts and Sciences Office of Student Affairs, 107 Low Memorial Library, Columbia University, New York, N.Y. 10027.

Combined Program with the School of Public Health

The School of Dental and Oral Surgery and the School of Public Health offer a joint program leading to the Master of Public Health degree in addition to the D.D.S. degree. Admission to the double degree program requires acceptance first by the School of Dental and Oral Surgery, with subsequent application and admission to the School of Public Health. Each degree is awarded independently when the respective requirements have been met. An early commitment is advisable, however, students can enter the program at any time during the first two and one-half years and have up to two years after dental school graduation to complete the requirements (which include 30 credits) for the M.P.H. degree.

The program is designed to graduate students who have the skills of dentistry as well as those of public health. In addition to a foundation in the basic biological sciences and clinical dentistry, students will gain broad insight into the complexities of the evolving health-care system in the United States and develop the skills required for them to assume roles as implementers and leaders within that system. Depending on the chosen area of public health concentration, students may develop special competence in epidemiology, biostatistics, health administration, the sociomedical sciences, and other areas of special interest.

The joint degree program is a major step in the education of interdisciplinary professionals who can be effective as practitioners and interpreters at the interface between dentistry, other health disciplines, and the health system. Graduates of the program are serving currently in administrative posts, the Public Health Service, general practice residencies, specialty residencies, the armed services, and private practice.

For further information, consult Dr. Donald Sadowsky, Director, Division of Community Health, School of Dental and Oral Surgery, Columbia University, 630 West 168th Street, New York, N.Y. 10032, telephone (212) 305-5546.

FACILITIES

The Dental Clinic

The School benefits in many ways from its location in the Columbia-Presbyterian Medical Center and its close cooperation in hospital activities. One of the functions of its clinic is the dental care of patients in the Center hospitals. Students are given a unique opportunity to gain experience in the diagnosis and care of those cases where a relationship exists between oral and general systemic diseases.

The student also learns at first hand the problems of providing dental care for the hospitalized patient. The wards and outpatient departments of the Medical Center give close contact and association with all branches of the health services.

In addition, the School has a modern dental teaching center with facilities for group practice by faculty members, general practice residents, and students.

The Library

The Health Sciences Library, housed in the Julius and Armand Hammer Health Sciences Center, provides a modern and efficient environment for study and research. The four floors occupied by the library offer a comfortable atmosphere conducive to study, including such amenities as individual study carrels, group study and conference rooms, typing rooms, and a lounge for leisure reading.

With more than 400,000 volumes and a staff of fifty, the library is one of the largest medical center libraries in the United States. It is well able to serve the needs of faculty members, students, and researchers in the various health science disciplines. Almost four thousand periodical titles are currently received. An entire floor of the library has been designated as a media center and is equipped with microcomputers and a variety of audiovisual materials. The library offers a full range of reference services including literature searching on many computerized databases, including MEDLARS.

Other Columbia libraries, located on the Morningside campus at 116th Street, are open to all students and faculty members who carry Columbia identification cards. The central library is Butler Library; special and departmental collections are housed in other buildings on the campus.



The D.D.S. Program

ADMISSION REQUIREMENTS

Candidates may apply after July 1 during the academic year preceding that for which they seek admission; the deadline for receipt of applications is March 1. Application is made through the American Association of Dental Schools Application Service (AADSAS). Application forms for this service can be obtained from the Office of Admissions, from any other participating dental school, or directly from AADSAS, 1619 Massachusetts Avenue N.W., Washington, D.C. 20036, telephone (202) 667-9433.

Upon submission of the AADSAS application, the applicant must send a check or money order for \$50, made payable to Columbia University, directly to the School of Dental and Oral Surgery. This fee, which covers the cost of processing the application, is required of all prospective students. Those wishing to be considered for a fee waiver should consult with the Office of Admissions and must supply the information necessary to support the waiver request. The fee is not refundable and is not credited toward tuition.

Required preparation: Three years at an accredited American institution or its equivalent including the following courses: physics, biology, inorganic chemistry, and organic chemistry. (8 points each); English composition and literature (6 points). It is not necessary to complete the academic requirements before applying, but all requirements must be completed before registration.

Recommended preparation: Additional courses in biochemistry, chemistry, advanced courses in biology, courses in mathematics, foreign languages, sociology, history, and the fine and industrial arts. The admission of a student depends primarily on preparation and intellectual capacity, but it also depends upon judgments of the student's character.

Interviews: A personal interview is required for admission. Because of the large number of applicants, the interview is by invitation only from the Committee on Admissions. Candidates who are chosen for an interview will be notified by mail, and some applicants living on the West Coast may have the option of being interviewed in California. Further instructions will be given to those candidates by the Office of Admissions.

Dental Admission Tests: All applicants must take the Dental Admission Tests, which are conducted by the Council on Dental Education at various testing centers throughout the United States and Canada. For further information, apply directly to the Division of Educational Measurements, Council on Dental Education of the American Dental Association, 211 East Chicago Avenue, Chicago, Ill. 60611.

Acceptance Fee: After receiving notice of acceptance, the applicant must notify the Committee on Admissions that he or she intends to enroll according to instructions specified in the letter of acceptance. The non-refundable acceptance fee of \$1,000 is applied to the applicant's tuition upon registration in the class to which he or she has been admitted. In addition, a secondary non-refundable deposit of \$500 is required to hold a student's seat in the class. Due dates for both deposits will be set by the Office of Admissions.

Combined Programs

With Barnard College. Under the "professional option" plan, selected students from Barnard College may receive the Bachelor of Arts degree from Barnard after the completion of three years of undergraduate work at Barnard and the first year in the School of Dental and Oral Surgery. To be eligible for this program, before entering the School the student must have completed 90 points of academic work at Barnard College and all of the prerequisite courses for the Dental School. To be eligible for the Bachelor of Arts degree, she must have completed 120 points, 30 of which may be earned at the Dental School, and she must have completed all of the general and major requirements of Barnard College.

With the School of General Studies. A limited number of highly qualified students may participate in a professional option program with the School of General Studies that reduces the usual time of study for the D.D.S. degree from eight to seven years. Professional option may be exercised after completion of 94 points, including at least 90 points of liberal arts subjects (including all courses required for the B.S. degree), and not less than 60 points of which must have been taken at Columbia University. (Courses taken at a Columbia graduate school count toward the 60 points.) The aim of this joint program is to offer a course of study by which students may reduce the time of preprofessional and professional preparation for dentistry as a means of providing earlier access to practice opportunities or postgraduate training.

Admission to the program and contingent early acceptance into the Dental School are based on the applicant's motivation to enter the field of dentistry, scholastic ability, and personal attributes. Early identification of candidates permits assignment to summer work-study programs in laboratories of the School of Dental and Oral Surgery and elsewhere on the Health Sciences campus. Part of the work-study experience consists of preprofessional tutorials with selected faculty members as preparation for basic biological sciences and provides the student with an introduction to techniques of scientific problem solving. Final acceptance into the School of Dental and Oral Surgery is conditional upon satisfactory completion of a minimum of two years with the School of General Studies under the professional option, including all courses that are prerequisite to the study of dentistry as well as satisfactory performance on the DAT. For further information, students should consult with the School of General Studies, Office of Admissions, 509 Lewisohn, on the Morningside campus.

In addition, the School of Dental and Oral Surgery also considers applications from highly motivated adult undergraduates in the School of General Studies who have completed at least 60 points toward the bachelor's degree including all courses that are required as prerequisite to the study of dentistry (see above). Under this arrangement, students transfer to the School of Dental and Oral Surgery after the end of the second year in the School of General Studies. Opportunities for continuing candidacy for the bachelor's degree from the School of General Studies are possible by arranging a special program that will satisfy the bachelor's degree requirements (see above).

Admission with Advanced Standing

Graduates of foreign dental schools who apply for admission with advanced standing are considered for placement into the mid-second year of the D.D.S. program. The program of study is anticipated to last two and one half years, pending satisfactory performance as determined by the Class Committees. Acceptance is based on prior academic record as well as official results of the National Board Exam, Part I, and the Test of English as a Foreign Language (TOEFL). A minimum TOEFL score of 600 required. Applications for admission are accepted between May 15 and June 30 *only*, for January enrollment. Upon review of a completed application, personal interviews are given at the request of the committee on advanced standing. Applicants invited for interview are subject to a mandatory bench exam to be administered by the School. A non-refundable \$100 application fee is required of all applicants. In addition the following credentials should be submitted in one mailing:

- Application, personal statement, application fee;
- Official results of the National Board Exam, Part I;
- Official results of the Test of English as a Foreign Language (TOEFL); note: as per University policy the minimum score required is 600, without exception;
- Official transcript of grades of undergraduate schools, dental programs and any postdoctoral study faculty. Must include notarized translations/evaluations;
- Letters of recommendation from (1) the academic dean of the dental school attended, (2) a faculty member, and (3) one reference from postdoctoral study faculty, if applicable.

Contact the Chairman of the Advanced Standing Committee, (212) 305-3573, for an official application form.

Transfer Admissions

The School of Dental and Oral Surgery considers applications for transfer into the first or second year on an individual basis. Space availability, curricular similarities and educational background are taken into consideration when reviewing applications. All decisions are made at the discretion of the academic dean, and are final.

Contact the Office of Admissions for an official application form and list of required materials.

SUMMARY OF THE D.D.S. PROGRAM

First Year

** Biomedical sciences are in bold type*

Introduction to dentistry D5001
 Sciences basic to the practice of dentistry **D5010, D5011**
 Epidemiology **D5015**
 Nutrition **D5101**
 Human clinical anatomy **D5102**
 Human development **D5103**
 Stress management **D5104**
 Neural science **D5105**
 Oral histology: growth and development D5361
 Dental anatomy and occlusion D5451, D5452

Second Year

** Biomedical sciences are in bold type*

Oral infectious diseases D6052
 Pharmacology **D6102**
 Dental health care delivery systems D6104
 Endodontic theory and technique D6201
 Dental auxiliary utilization D6250
 Operative dentistry D6301, D6305
 Pain control D6401
 Introduction to oral and maxillofacial surgery **D6403**
 Pathophysiology **D6404, D6405**
 Physical diagnosis D6500
 Periodontics D6702, D6710
 Prosthodontics D6800, D6820
 Introduction to the patient I D6851
 Oral radiology D6902

Third Year

Area of concentration D7001
 Community health D7105
 Practice management D7151
 Ethics D7160
 Endodontics D7202, D7205
 Clinical restorative dentistry D7308
 Intermediate operative dentistry D7310
 Basic oral and maxillofacial surgery D7402
 Pain control D7412
 Principles of orthodontics D7502
 CPR/medical emergencies D7500
 Physical diagnosis clerkship D7505
 Pediatric dentistry D7656, D7710
 Periodontics D7702, D7705
 Prosthodontics D7810, D7815
 Dental materials D7831
 Introduction to the patient II D7851
 Spanish D7900
 Oral pathology and oral medicine D7912
 Facial pain D7913
 Oral radiology D7932

Fourth Year

Area of concentration D8001
 Senior interdisciplinary series D8001
 Extramural hospital rotation D8011
 Gerontology/geriatric dentistry D8022
 Endodontics: advanced clinical practice D8202
 Child abuse recognition/reporting D8300
 Operative dentistry D8302
 Treatment of medically compromised patient D8452
 Clinical cancer training D8460
 Practice of pediatric dentistry D8651
 Periodontics D8710, D8715
 Orthodontics: clinical practice D8800
 Prosthodontics D8802
 Advanced restorative clinical practice D8804
 Dental materials D8830
 Oral radiology clinic D8931

Required Summer Clinics

These sessions are held in June, July and August of the summers between years two and three and years three and four. A fourth year clinical summer extension (M0004) may be required for students who fail to meet all their educational requirements in a timely manner for graduation.

COURSES OF INSTRUCTION

The University reserves the right to withdraw or modify the courses of instruction or to change instructors as may be necessary.

Basic Biomedical Courses

(Taught by members of the faculties of the College of Physicians & Surgeons and the School of Dental & Oral Surgery)

D5010, D5011. Sciences basic to the practice of dentistry
Professor Chase and interdepartmental associates. First year.
Lectures, conferences and laboratories integrating principles of biochemistry, molecular and cell biology, tissues and systems biology, human physiology, genetics and human development.

D5015. Epidemiology
Professors Nickerson, Sadowsky and the staff. First year.
Lectures and conferences integrating principles of biostatistics and epidemiological issues in health care in general and dental care in particular.

D5101. Nutrition
Professor Prystowsky and the staff. First year.
Lectures and conferences that provide an understanding of the principles of nutrition as part of overall health care.

D5102. Human clinical anatomy
Professors April, Ambron, Moss-Salentijn and the staff. First year.
Individual performance of regional dissections of the body by each student is required. Lectures stress functional interpretation and correlation of developmental anatomy with gross anatomy.

D5103. Human development
Professor Silverman and the staff. First year.
Lectures on selected topics in human developmental biology.

D5105. Neural science
Professors Kupferman and Goldberg. First year.
Lectures and conferences that provide an integrated understanding of neurophysiology, neuroanatomy, neurochemistry and behavior.

D6102. General and special pharmacology
Professor Wit and the staff. Second year.
A rigorous course which features lectures, laboratories and discussions dealing with the basic principles of pharmacology and with traditional drugs used in dental and medical practice. A thorough understanding of the material presented adds interest to the student's future dental practice and helps the student to render a more effective service to patients.

D6404, D6405. Pathophysiology
Professors Canfield, Schreiber and interdepartmental associates. Second year.

Lectures, conferences and laboratories integrating principles of general cellular pathology, immunology, infectious diseases, systemic pathology, including oral pathology, and an introduction to the relationship of basic sciences to systemic diseases presented by the patient. Didactic presentations are supplemented with preceptor group discussions using a case study format. The course is intended to stimulate discussions of medical and dental patient management.

Interdisciplinary Dental Courses

D5001. Introduction to dentistry
Professors Hills, Davis and the staff. First year.
An overview of the profession of dentistry is presented in a lecture series with multiple guest speakers. The scope of dentistry and of the recognized dental specialties, the etiology and prevention of the most common oral diseases, and the relationship of dentistry to the health care system are discussed. The ethical foundations of professionalism are introduced.

D5361. Oral histology: growth and development
Professors Moss-Salentijn, Horowitz and Klyvert. First year.
Lectures, laboratories and conferences on the detailed microscopic anatomy and the development of the dental and associated orofacial structures. The clinical significance of this basic science is emphasized throughout.

D6052. Oral infectious diseases
Professor Albert and the staff. Second year.
Lectures and seminars on etiology, histopathology, measurement and prevention of caries with focus on epidemiological aspects and preventive techniques for improving host resistance and special emphasis on fluorides. Transmission of oral infections and infection control procedures are included.

D7001. Area of concentration
Staff. Third year.
Lectures, seminars, library assignments and, when applicable, in-depth clinical experience in a selected track of the Area of Concentration program.

D8001. Area of concentration
Staff. Fourth year.
Lectures, seminars, research and, when applicable, clinical experience in a continuation and extension of the selected track of the Area of Concentration program.

D8001. Senior interdisciplinary series
Professor Evangelidis and the staff. Fourth year
Lectures, literature review and case presentations in all areas of dental practice with emphasis on the comprehensive care of dental patients. Jurisprudence as it affects dental practice is reviewed. A series of sessions dealing with ethics in dentistry is included.

D8022. Gerontology/geriatric dentistry
Professors Formicola and Tepper. Fourth year.
Lectures on the dental, medical, psychological, social and economic aspects of aging and factors affecting dental utilization for the older patient, with treatment planning protocols for both well and compromised elders.

Community Health

(This section includes the Behavioral Sciences)

D5104. Stress management

Professor Tepper. First year.

The purpose of this course is to explore both the theoretical and the practical aspects of stress and stress management, with an emphasis on the application of stress reduction techniques. Topics include relaxation techniques, nutrition, sleep, meditation, exercise and other approaches to the management of stress in one's personal and professional life.

D6104. Dental health care delivery systems

Professor Albert. Second year.

The factors that are influencing the practice of dentistry today will be addressed in this course. The role that government and the private insurance industry have had in restructuring the delivery of dentistry will be explored. The regulation of health care, the emphasis on quality, and the type of practice setting the dentist will ultimately choose are all undergoing remarkable change. By analyzing current trends and organized dentistry's response to them, the student will be prepared to make logical career decisions and to participate in the process that shapes health care and dentistry.

D6851. Introduction to the patient I

Professor Tepper and the staff. Second year.

This course is designed to help students develop the knowledge, skills and personal qualities necessary for effective interpersonal communication in the dental setting. Topics include interviewing and history-taking skills, non-verbal cues, patient anxiety reduction, and psychosocial and ethnocultural aspects of patient care. Ethical issues in patient-dentist and dentist-patient communication are explored.

D7105. Current controversies in clinical dentistry: a critical review

Professor Sadowsky. Third year.

This course will review key issues in the management of patients. Scientific evidence presenting diverse views will be assessed. Students will learn how to evaluate the literature, so that they will be better prepared to make independent judgments in their future careers.

D7151. Practice management

Professors Kaplan and Yablon. Third year.

The lecture-seminar series presents information essential to purchasing or establishing a dental practice, or joining an existing practice as Associate or Partner, and to developing the management skills necessary for delivery of quality care. The mechanisms of office and personnel management are discussed.

D7851. Introduction to the patient II

Professor Tepper and the staff. Third year.

This course focuses on skills learned in (D6851) and emphasizes the gathering, interpreting and synthesizing necessary to make appropriate treatment planning decisions about information related to psychosocial aspects of care. Students learn from their clinical experiences by critically analyzing themselves and their classmates using self-prepared videotapes of their patient interactions. Ethical issues that have surfaced during patient care are examined.

D7160. Ethics

Professor Miner and the staff. Third year.

A series of case-based discussions about ethical issues confronting the dental practitioner. Cases are selected and introduced by members of the New York Academy of Dentistry.

D7900. Spanish

Ms. Tamayo. Third year.

Introduction to basic communication skills to interact with members of the Latin patient population of the clinics.

Endodontics

D6201. Endodontic theory and technique

Professor Calvey and the staff. Second year.

Lectures and seminars on the fundamentals of endodontics. Demonstrations and exercises in endodontic technique on extracted teeth.

D7202. Basic endodontics

Professor Calvey and the staff. Third year.

Lectures and demonstrations in the practice of endodontics.

D7205. Clinical practice of endodontics

Professor Calvey and the staff. Third year.

The clinical practice of endodontics.

D8202. Advanced clinical practice

Professors Hasselgren and Calvey. Fourth year.

Clinical experience in advanced problems in endodontic therapy and technique.

Oral and Maxillofacial Surgery

(Section comprises *Oral and Maxillofacial Surgery*, *Oral Radiology*, and *Stomatology*)

Oral and Maxillofacial Surgery

D6104. Pain control

Professor McCabe. Second year.

Lectures and demonstrations on the various modalities of sedation, analgesia and general anesthesia and their use in the dental office.

D6403. Introduction to oral and maxillofacial surgery

Professor Schreiber. Second year.

Lectures and clinical experience to prepare students for basic oral surgery procedures. The armamentarium, techniques and complications of exodontia are stressed.

D6500. Physical diagnosis

Professor Schreiber and the staff. Second year.

Education and training in obtaining a medical history, performing a physical examination and documenting both. Part of the training takes place during a one-week extramural hospital rotation. The development of these skills and techniques will be a sequenced process. An important objective is to have the student use these skills and knowledge to assign a risk assessment to his/her patients.

D7402. Basic oral and maxillofacial surgery

Professor L. Mandel and the staff. Third year.

Further discussion on basic oral and maxillofacial surgical services, introductory lectures in areas with the full scope of oral and maxillofacial surgery, and clinical experience in delivering ambulatory oral and maxillofacial surgery services.

D7412. Pain control*Professor McCabe. Third year.*

Lectures and demonstrations on the various modalities of sedation, analgesia and general anesthesia and their use in the dental office.

D7500. CPR/medical emergency*Professor Schreiber and the staff. Third year.*

Lectures, demonstrations and training for basic life support certification. Reviewed in detail are management of medical emergencies, with follow-up mock drills in the dental clinic.

D7505. Physical diagnosis hospital clerkship*Professor L. Mandel. Third year.*

Prerequisites: Oral and Maxillofacial Surgery D6401, D6403, D6500, D7500. The student is assigned as a clerk to the Oral and Maxillofacial Surgery Service at an affiliated hospital for one month, with responsibilities in physical evaluation of both inpatients and outpatients, in assisting in hospital admissions and patient care, and assisting in oral surgical care of both operating room and ambulatory patients.

D7913. Facial pain*Professor Syrop and the staff. Third year.*

Lectures on the various aspects of facial pain and its diagnosis and treatment. Emphasis is placed on temporomandibular joint dysfunction and disease.

D8011. Extramural hospital rotation*Professor L. Mandel. Fourth year.*

The student is assigned to an affiliated hospital for a one-day rotation every two weeks. Students are assigned to various affiliated hospital dental services with the purpose of delivering dental services in a hospital setting. Such facilities offer the student exposure to a patient population whose access to care is limited by systemic disease and social, economic and cultural conditions.

D8452. Treatment of the medically compromised patient*Professor Schreiber and the staff. Fourth year.*

Lectures and clinical experience in treating patients who have various types of medical and/or other handicapping conditions.

D8460. Clinical cancer training*Professor Marder. Fourth year.*

Lectures in the clinical diagnosis and dental and oral management of tumors of the head, face and neck are presented. Legal responsibilities, psychosocial issues and recent advances in the field of cancer are also addressed.

Oral Radiology**D6902. Oral radiology***Professor Serman and the staff. Second year.*

Lectures on the pertinent basic concepts of dental radiology and their application in clinical practice. Introduction to radiographic techniques and the fundamentals of radiation safety.

D7932. Oral radiology.*Professor Serman and the staff. Third year.*

Didactic and clinical course with seminars enabling the student to take, process and interpret radiographs. Preclinical mannikin laboratory on intraoral radiography and exercises in dental radiographic interpretation.

D8931. Oral radiology clinic*Professor Serman. Fourth year.*

Rotations in oral radiology during which students take intra- and extraoral radiographs and have seminars on differential diagnoses of radiographs as well as demonstrations of selected extraoral radiographic techniques.

Stomatology**D7912. Clinical oral pathology and medicine***Professors Zegarelli and Pulse. Third year.*

This is a 90-hour didactic course devoted to the clinical, radiographic and microscopic features of numerous oral disease entities. Common, uncommon and many rare diseases are studied in a comprehensive manner. Differential diagnosis is emphasized. The interrelationships of many diseases along with their treatments are discussed.

Orthodontics**D7502. Principles of orthodontics***Professor Efstratiadis and the staff. Third year.*

Lectures, seminars, laboratory and clinic. Basic concepts in orthodontic diagnosis and treatment planning with special emphasis on the identification and evaluation of malocclusions. Instruction in diagnostic and treatment procedures enables the student to recognize, classify and assess malocclusions effectively. Appliances for interceptive and adjunctive orthodontic treatment are constructed in the laboratory and used in the clinic for correction of uncomplicated localized orthodontic problems.

D8800. Clinical practice of orthodontics*Professor Cangialosi, Efstratiadis and the staff. Fourth year.*

Treatment of minor orthodontic problems including space regaining and space closure, correction of crossbites, pre-prosthetic tooth positioning and other problems requiring limited tooth movement. The student may continue treatment of patients begun in the third year.

Pediatric Dentistry**D7656. Preclinical pediatric dentistry technique***Professor Metcalf and the staff. Third year.*

Preclinical instruction in restorative techniques frequently utilized in the treatment of children. Modifications of tooth preparations for primary and young permanent teeth are stressed.

D7710. Theory of pediatric dentistry*Staff. Third year.*

Lectures and seminars on diagnosis and treatment planning for the primary and mixed dentition. Emphasis is placed on consideration of the entire child from psychological, medical and oral health perspectives. The student learns to provide appropriate preventive measures, patient management, care of trauma, adhesive restorative techniques, space maintenance, and interceptive and preventive orthodontic procedures for children and adolescents. The clinical phase of the course is held once weekly beginning in April and concentrates on the application of the preceding principles.

D8300. Child abuse recognition/reporting

Professor Burkes. Third or Fourth year

A 3-hour lecture on the recognition of evidence of child abuse, management and reporting protocols.

D8651. Practice of pediatric dentistry

Professor Rathi-Hernandez and the staff. Fourth year.

Students are assigned to treat children and adolescents one-half day per week. Comprehensive oral health care and preventive procedures are performed. All routine aspects of clinical care of children are covered.

Periodontics

D6702. Principles of periodontics I

Professors Fine, Schwartz and the staff. Second year.

Lectures in the diagnosis, etiology and treatment of periodontal diseases. Application of basic biologic sciences to the pathogenesis and treatment of periodontal diseases.

D6710. Workshop and clinical practice in periodontics I

Professors Fine, Schwartz and the staff. Second year.

Laboratory and clinical practice in examination and documentation of clinical findings in the periodontal patient: prophylaxis, subgingival scaling and root planing; teaching and motivating patients to perform personal oral hygiene.

D7702. Clinical practice of periodontics

Professor Fine and the staff. Third year.

Clinical experience. Emphasis on the clinical management of more complex periodontal cases, including the performance of simple periodontal surgical procedures. Observation and assistance of postdoctoral periodontics students in surgical and other procedures.

D7705. Principles of periodontics II

Professor Fine and the staff. Third year.

Lectures and seminars on periodontal surgery, occlusal traumatism, occlusal adjustment, specific periodontal diseases and infections, systemic background factors and interrelationships, methods of temporary stabilization of teeth.

D8710. Advanced clinical practice of periodontics

Professor Fine and the staff. Fourth year.

Clinical experience. Emphasis on the clinical management of more complex periodontal cases, including the performance of simple periodontal surgical procedures. Observation and assistance of postdoctoral periodontics students in surgical and other procedures.

D8715. Principles of periodontal treatment planning and case presentation

Professors Fine, Schwartz and the staff. Fourth year.

Treatment Planning Seminar with postdoctoral students and third year students reviewing actual clinical cases.

Restorative Dentistry

(Comprises the Divisions of *Operative Dentistry* and *Prosthodontics*)

Operative Dentistry

D5451, D5452. Dental anatomy and occlusion

Professors Bockler, Hadavi and the staff. First year.

Lectures and laboratory sessions in oral anatomy, dental morphology, phylogeny of the dentition, and dental occlusion.

D6250. Dental auxiliary utilization

Professor Brunza and the staff. Second year.

Lectures and demonstrations on the duties of and the interaction with the Dental Auxiliary.

D6301. Introduction to operative dentistry

Professor Hadavi and the staff. Second year.

Lectures on the fundamentals of operative dentistry, including the etiology of dental caries and the biological approach to the technical procedures in the restoration of teeth. Periods of clinical observation are an integral part of this course.

D6305. Preclinical operative technique

Professor Hadavi and the staff. Second year.

Laboratory and simulated exercises in the fundamental techniques of operative dentistry. The development of the basic skills in the delivery of restorative dentistry.

D7308. Clinical restorative dentistry

Professor Zubianurre and the staff. Third year.

Introduction to the clinical practice of restorative dentistry. Clinical experience in the recognition of disease and related conditions, prevention, treatment planning and restoration to form and function.

D7310. Intermediate operative dentistry

Professor Lichtenthal and the staff. Third year.

Lectures and demonstrations in advanced techniques in operative dentistry, developments in dental materials, and approaches to restorative dentistry.

D8302. Operative clinical exams

Professor Lichtenthal and the staff. Fourth year.

Clinical examinations and simulated Board examinations to evaluate clinical competency and in preparation for certification examinations.

Prosthodontics

D6800. Preclinical prosthodontics technique

Professor Phillips and the staff. Second year.

Laboratory course that introduces the basic design and fabrication of fixed partial, removable partial and removable complete prostheses by means of demonstrations and audiovisual aids. Students simulate laboratory and clinical procedures on models in preparation for the clinical performance of prosthodontics.

D6820. Introduction to prosthodontics

Professor Phillips and the staff. Second year.

Companion to course D6800. Lectures and seminars on basic theory and procedures in prosthodontics.

D7810. Advanced preclinical prosthodontics technique

Professor Phillips and the staff. Third year.

Continuation of course D6800. Additional laboratory and clinical procedures are presented for student simulation.

D7815. Intermediate prosthodontics

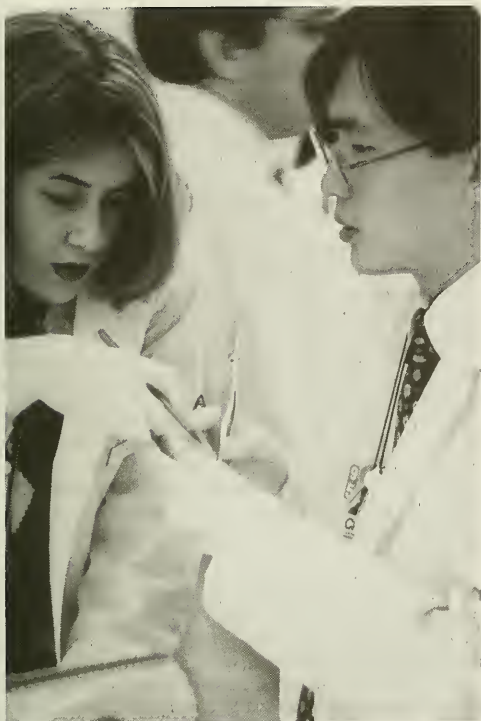
Professor Phillips and the staff. Third year.

Companion to course D7810. Lectures and seminars beyond the basic level on the theory and procedures in prosthodontics.

D8802. Prosthodontics clinical exams

Professor Wright and the staff. Fourth year.

Clinical competency examination which simulates the licensure examination in Removable Complete Prosthodontics.



Clinical competency in Fixed and Removable Partial Prosthodontics is also evaluated.

D8804. Advanced restorative clinical practice

Professors Evangelidis, Ackerman and the staff. Fourth year. Lectures, demonstrations and clinical experience in the biologic principles and practice of basic restorative dentistry, including operative dentistry, fixed prosthodontics and removable prosthodontics. Emphasis is on comprehensive patient care.

Dental Materials

D7831. Dental materials

Professor McAlarney. Third year.

A lecture series covering the important chemical and physical properties of dental materials, and the effect of improper manipulation on those physical properties.

D8830. Selection of dental materials

Professor McAlarney. Fourth year.

A lecture series dealing with new developments in dental materials and the interpretation of new product literature as an aid to selecting new dental products for clinical use.

Area of Concentration Program

Beginning with the autumn term of the third year, students have the opportunity to select an individualized Area of Concentration, or "minor" program, from among more than 15 elective "tracks". The "track" continues through the third and fourth years of the D.D.S. curriculum and, for those students who remain at the School, into the postdoctoral fellowship year. Selection of an Area of Concentration is made from one of five broad areas. Within each of the broad concentrations are a number of elective pathways that offer diverse programs suited to the individual student's interest and objectives. Several tracks (see below) consist of courses primarily taken in the Dental School. Other tracks include a combination of courses that use the educational resources of other Schools of the University, as well as the Dental School. Combined tracks, for example those with the School of Public Health, may lead to joint D.D.S.-M.P.H. or D.D.S.-M.S. degrees, permitting the student to broaden his/her educational expertise beyond dentistry.

Advanced Clinical Dentistry

- Endodontics
- Orthodontics
- Pediatric Dentistry
- Periodontics
- Prosthodontics

Comprehensive Dentistry

- Behavioral Science
- Geriatric Dentistry
- Dental Educator
- Joint Degrees (D.D.S.-M.P.H., D.D.S.-M.S.)

Diagnostic Sciences

- Oral Medicine/Oral Pathology
- Oral Radiology

Hospital Dentistry

- Oral and Maxillofacial Surgery
- Special-Needs Patients

Research

- Non-degree, independent study
- M.A. track

Area of Concentration Program: Courses of Study

Offered in the third and fourth year of the curriculum. For a complete description of the elective "minor" curriculum, see the publication *Area of Concentration Programs, Columbia University School of Dental and Oral Surgery*, available from the office of the Assistant Dean for Student Affairs.

Area of Concentration Courses D7001-D7002, D8001-D8002

Selective course work as described in the Area of Concentration publication.

Postdoctoral Programs in Dental Specialties

ADMISSION REQUIREMENTS

To be admitted to any program, an applicant must hold the D.D.S., D.M.D., or equivalent foreign degree in dentistry. International students are required to demonstrate sufficient knowledge of English by submitting a score of 600 or higher in the Test of English as a Foreign Language (TOEFL) as part of their application. They may also be required to pass a clinical competence examination.

Applicants to the *combined* postdoctoral specialty and graduate (degree) programs are required to submit GRE scores as part of their application.

When to apply: Before October 1 for Orthodontics, before November 1 for Periodontics, before December 1 for Prosthodontics, and before December 31 for Endodontics and Pediatric Dentistry for admission in the following calendar year.

Selection criteria: The Postdoctoral Admissions Committee uses the following criteria in the selection of candidates: academic record, research and publication records, extracurricular achievements, honors and awards, class standings, professional experience, references, interview, National Board Scores (U.S. applicants), and TOEFL scores (foreign applicants).

Admission procedure: Write to the Postdoctoral Admissions Office, School of Dental and Oral Surgery, 630 West 168 Street, New York, N.Y. 10032, for an application form, which must be completed and returned to the division to which the applicant is seeking admission. The completed form should be accompanied by the application fee of \$50. This fee is required of all applicants. An application for admission cannot be considered until the fee has been paid or until it has been waived by formal action of the admissions authorities of the School. The fee is not refundable and is not credited toward tuition.

As requested in the form, the applicant should ask each of the colleges or universities attended—for both preprofessional and professional studies—to send official transcripts of the record directly to the director of the postgraduate division to which the applicant is seeking admission, together with letters of recommendation. Official proof of current licensure should also be submitted.

Personal interview: The program director may ask an applicant to come to the School for a personal interview.

Acceptance fee: Within ten days after receiving notice of acceptance, the applicant must notify the Committee that he or she intends to enroll and must send a check or money order for the amount specified in the acceptance letter, made payable to Columbia University. This acceptance fee is credited to the applicant's tuition upon registration in the class to which he or she has been admitted. If the applicant does not register in that class, the acceptance fee will be retained by the University.

POSTDOCTORAL PROGRAM IN ENDODONTICS

This two-year program provides a specialist training in endodontics. The program consists of basic science courses

and courses more directly related to clinical endodontics. The basic science, core courses are given primarily during the first year. These courses are: *Anatomy of the head and neck, Histology and embryology, Physiology, Psychiatry, and Research methodology*. More clinically oriented courses, such as *Cardiology, Radiology, Anesthesiology, Stomatognathic physiology, and Traumatology* are also offered.

In addition to these courses, topics more directly related to the endodontics clinic are given throughout the two years, e.g., *Theory and practice of endodontics, Anatomy and technique of endodontics, Pulp biology, Surgical endodontics, Endodontic-periodontic relationships, Clinical practice in endodontics, and Review of endodontic literature*.

In addition to these courses there is a series of guest lectures, where lecturers are invited to give their views or latest research results on selected topics.

In clinical endodontics the students are exposed to a faculty with vast clinical experience. One endodontic method is used as a clinical baseline. When the postgraduate students have learned to master this method, they are encouraged to try out other methods. The clinical faculty, most of whom are successful practitioners in New York City, come from different universities and they can therefore expose the students to different ideas. Because an excellent way of learning a topic is to teach it, the students are involved in the teaching of undergraduate dental students.

The Division of Endodontics is strongly research-oriented and closely related to the Laboratory of Oral Physiology. Students are required take part in at least one research project. There are two main research tracks within the Division of Endodontics. One track involves basic science research in the Laboratory of Oral Physiology, and the other deals with clinical and clinically oriented research.

First Year

AUTUMN TERM

D9200	Theory and practice of endodontics
D9204	Anatomy and technique of endodontics
D9205	Clinical practice of endodontics
D9210	Review of endodontic literature
D9227	Guest lecture series
D9905	Oral medicine/oral pathology
D9912	Anatomy of the head and neck
D9915	Psychiatry, psychosomatic medicine
D9922	Oral physiology
D9930	Bone chemistry and the mineralization process

SPRING TERM

D9201, D9206, D9211, and D9228 are offered in the spring term. They are continuations of courses offered in the autumn term.

D9913	Radiology
D9215	Endodontic-periodontic relationships
D9216	Pulp biology*
D9218	Surgical endodontics
D9900	Research methods and statistics
D9901	Cariology
D9913	Radiology
D9920	Histology and embryology
D9923	Pharmacotherapeutics
D9940	Environmental hazards

Second Year

SUMMER TERM

D9209 Clinical practice of endodontics

AUTUMN TERM

D9202, D9207, D9212, D9219, and D9229 are offered in the second year. They are continuations of courses offered in the first year.

D9214 Pain seminars

D9221 Thesis

D9916 Temporomandibular joint disorders

SPRING TERM

D9203, D9208, D9213, D9220, D9222, and D9230 are offered in the spring term. They are continuations of courses offered in the autumn term.

D9216 Pulp biology*

*NOTE: D9216. *Pulp biology* will be offered every two years, on the odd-numbered year (e.g., spring 1995, spring 1997).

COURSES OF INSTRUCTION

D9200x-D9201y, D9292x-D9203y. Theory and practice of endodontics

Professors F. Goodman and C. Solomon

Lectures and seminars on past and current theory in endodontics and its relation to modern endodontic practice. Guest lecturers will speak on current developments in the field of endodontics or related disciplines. *Ninety hours per year.*

D9204x. Anatomy and technique of endodontics

Professors Hasselgren, Cantor, and Calev

Lectures and laboratory sessions on the anatomy of roots, pulp chambers, and root canals. Lectures and demonstrations on endodontic armamentarium and materials. Lectures, demonstrations, and technique sessions on the cleaning, shaping, and filling of canals of extracted teeth. *Forty-five hours.*

D9205x-D9206y, D9207x-D9208y, D9209z. Clinical practice in endodontics

Professor Hasselgren and the staff

Supervised clinical experience in all phases of operative endodontics. During the second year, instruction and experience teaching undergraduate clinical endodontics are included.

D9210x-D9211y, D9212x-D9213y. Review of endodontic literature

Professor Hasselgren

Intensive discussion of past and current literature in Endodontics and related fields. Reports by students on reading assignments.

D9216y. Pulp Biology

Professor Hasselgren

Normal and pathological conditions of the dental pulp. Biological background for pulpal injury, inflammation, and repair. *Sixteen two hour sessions and demonstrations.*

D9218y, D9219x-D9220y. Surgical endodontics

Professor Kellert

Lectures, demonstrations, and clinical experience in problems requiring surgical endodontic treatment. *Lecture: 26 hours, clinic: 78 hours.*

D9221x-D9222y. Thesis

Professor Hasselgren

The student conducts an investigation approved by the program director. The results of the investigation must be presented in the form of a thesis which should be completed one month before the end of the final term. If possible, the results shall be published in a respected journal.

D9227x-D9228y, D9229x-D9230y. Guest Lecture Series

Prominent researchers are invited to lecture or conduct seminars in the areas of late advances in endodontic theory, practice, or research.

POSTDOCTORAL PROGRAM IN ORTHODONTICS

The postdoctoral training program in the Division of Orthodontics begins in July of each year and extends for a period of twenty-four consecutive months. It provides intensive advanced training in the biological and clinical sciences related to the art and science of orthodontics and is designed to satisfy all requirements for eligibility for the specialty board in orthodontics. The program, fully accredited by the A.D.A., is well-rounded and provides balanced training in clinical orthodontics and the basic sciences relative to orthodontics so that the graduate of this program is prepared to pursue a career as a clinician with practice limited to orthodontics and as a teacher in clinical orthodontics.

To provide clinical experience, lectures, seminars and extensive laboratory courses are integrated with the treatment of various classifications of malocclusions in the clinic using fixed multibanded and bonded techniques as well as removable, functional and orthopedic appliances. Emphasis is given to the fundamental edgewise and Begg philosophies of treatment. Several modifications of basic edgewise mechanotherapy are taught in addition to the differential force straight wire technique. Lectures on temporomandibular dysfunction prepare the student for rotations in the multidisciplinary TMD clinic. Joint conferences and clinic sessions are held with the Division of Oral and Maxillofacial Surgery to present cases, plan treatment and review patient progress. Students also regularly attend cleft palate/craniofacial team conferences and attend multidisciplinary seminars in adult orthodontics and the periodontally compromised patient.

The postgraduate student is required to submit a written thesis (in this case to the division) to qualify for graduation. Thus, all students are required to engage in research activities. To acquaint the student with the procedures for certification by the American Board of Orthodontics, another requirement for graduation is the presentation of records of two completed patients according to A.B.O. guidelines. These presentations are arranged as mock A.B.O. examinations in front of board-certified faculty.

First Year

SUMMER SESSION

D9500	Orthodontic technique
D9956	Introduction to orthodontics
D9957	Cephalometrics: growth and development
D9958	Orthodontic diagnosis and treatment planning
D9501	Clinical orthodontic practice

AUTUMN TERM

D9507	Biomechanics
D9515	Orthodontic literature review
D9521	Theory and practice of orthodontics
D9911	Functional anatomy of the head and neck
D9912	Anatomy of the head and neck
D9922	Physiology
D9930	Bone chemistry and the mineralization process
D9966	Orthognathic surgery conference

SPRING TERM

D9502, D9516, D9522, D9959, and D9967 are offered in the spring term. They are continuations of courses offered in the autumn term.

D9525	Thesis
D9900	Research methodology and statistics
D9901	Cariology
D9903	Human development
D9913	Radiology
D9920	Histology and embryology
D9935	Dental materials

SUMMER SESSION

D9503 and D9526 are offered in the Summer Session. They are continuations of courses in the spring term.

Second Year

AUTUMN TERM

D9504 and D9527 are offered in the autumn term and are continuations of courses offered in the Summer Session.

D9509	Orthodontic diagnosis and treatment
D9517	Orthodontic literature review
D9523	Theory and practice of orthodontics
D9540	Ortho-perio relationships
D9904	Craniofacial anomalies
D9905	Oral medicine and clinical oral pathology
D9915	Psychiatry and psychosomatic medicine, and their relationship with dentistry
D9916	Temporomandibular disorders and orofacial pain
D9917	Temporomandibular joint dysfunctions and myofascial pain dysfunction problems
D9968	Orthognathic surgery conference

SPRING TERM

D9505, D9510, D9518, D9524, D9528, D9918 and D9969 are offered in the spring term. They are continuations of courses offered in the autumn term.

D9508	Practice management in orthodontics
D9520	The cleft palate patient
D9923	Pharmacotherapeutics
D9940	Environmental hazards and materials management

SUMMER SESSION

D9506 and D9529 are offered in the Summer Session. They are continuations of courses offered in the spring term.

Courses of Instruction

D9500x. Orthodontic technique

Professors Bramante, Marouni, Meistrell and the staff.

Intensive technical instruction and lectures in the assembling and manipulation on typodonts of removable, labiolingual, edgewise, extraoral forces, twinwire and Begg appliances, retainers and bite plates. Six three-hour sessions a week for eleven weeks.

D9501x-D9502y and D9504x-D505y and D9506z.

Clinical orthodontic practice

Professor Cangialosi and the staff.

Supervised clinical practice in the use of functional, edgewise, extraoral and Begg appliances. Eight three-hour sessions a week.

D9507x. Biomechanics

Professor Brustein.

Lectures in the design and function of orthodontic appliances and the reaction of teeth, bone and periodontal tissues to applied forces. A review of forces, moments, with properties and their relationship to physiological responses. Different methods to vary the moment and force are discussed.

D9508xy. Practice management in orthodontics

Professor Bramante.

Lectures on the administration of orthodontic practice. Fifteen one-hour lectures in alternate years.

D9509x-D9510y. Orthodontic diagnosis and treatment planning

Professor Cangialosi and the staff.

One one-hour seminar a week.

D9515x-D9516y. Orthodontic literature review

Professor Efstratindis

One one-hour seminar a week.

D9517x-D9518y. Orthodontic literature review

Professor Siegel.

One one-hour seminar a week.

D9520y. The cleft palate patient

Professor Isaacs and the staff.

Lectures on the various problems in the treatment of cleft palate by the orthodontist. Coordination with related specialties is emphasized. Six two-hour lectures.

D9521x-D9522y, D9523x-D9524y. Theory and practice of orthodontics

Professor Cangialosi and the staff.

Lectures, discussions, and demonstrations in which theory is correlated with clinical observation and practice. Three one-hour lectures a week in the first year and one lecture hour a week in the second year.

D9525y-D9526z, D9527x-D9528y, D9529z. Thesis

Professor Cangialosi and the staff.

The student conducts an investigation dealing with a subject of the student's choice and approved by the program

director. The results of the investigation must be presented in the form of a written thesis that should be completed one month before the end of the final term.

D9540x. Ortho-perio relationships

Professor Geiger.

Consideration of orthodontic-periodontic relationships as they relate to etiology, treatment planning and management with special emphasis on the adult dentition.

D9956x. Introduction to orthodontics

Professor Cangialosi and the staff.

Consists of a series of lectures that survey the entire field of orthodontics. Provides the student with background information that is required in order to begin treating patients and prepares the student for a more detailed study of laboratory and clinical procedures. Thirty lecture hours.

D9957x. Cephalometrics: growth and development

Professor Meistrell.

A survey of growth and development of the dentition and face, including the theory and practice of taking standardized head roentgenograms utilizing a cephalostat, laboratory procedure in the methods of making tracings, and the clinical evaluation of headfilms. Ten one-hour lectures and four three-hour laboratory sessions.

D9958x-D9959y. Orthodontic diagnosis and treatment planning

Professor Cangialosi and the staff.

One one-hour seminar a week.

D9966x-D9967y, D9968x-D9969y. Orthognathic surgery conferences and lecture series.

Professors Cangialosi and Rose.

Seminars in diagnosis and treatment planning of those cases that exhibit complex dento-facial dysplasias requiring both surgical and orthodontic treatment for their resolution. Cases are presented by students and staff of the Divisions of Oral and Maxillofacial Surgery and Orthodontics. One one-hour seminar each month. Lectures: eight hours.

POSTDOCTORAL PROGRAM IN PEDIATRIC DENTISTRY

The two-year, full-time program leading to a Certification of Training in Pediatric Dentistry approved by the Commission on Accreditation includes core courses in basic sciences, development psychology, and dental and medical courses supporting the practice of pediatric dentistry and care for the handicapped patient.

During the two years, emphasis is placed on clinical practice, using a variety of methods of behavior modification, training in conscious sedation, operating-room procedures and interceptive orthodontics. Comprehensive patient care in pediatric dentistry is stressed in conjunction with preventive dentistry concepts. Integral parts of the program include a literature review seminar, current practices seminars, anesthesiology, pediatric medicine, and case presentations. Orthodontic techniques are presented and clinical experience is gained in growth and development guidance. Literature seminars facilitate the taking of the examinations of the American Board of Pediatric Dentistry. The student conducts a pediatric dental investigation that is then pre-

sented in the form of a publishable thesis. Undergraduate teaching experience is gained in the second year.

Descriptions of the following courses are given under Courses of Instruction, below.

First Year

AUTUMN TERM

D9507	Biomechanics
D9600	Pediatric dental theory: technique and practice
D9602	Pediatric dentistry clinical practice
D9620	Preventive and interceptive orthodontic clinic
D9624	Interceptive orthodontics seminar
D9636	Pediatric dentistry departmental seminars
D9643	Review of the literature in pediatric dentistry
D9905	Oral medicine and clinical oral pathology
D9911	Functional anatomy of the head and neck
D9912	Anatomy of the head and neck
D9922	Physiology
D9956	Introduction to orthodontics
D9957	Cephalometrics: growth and development
D9958	Orthodontic diagnosis and treatment planning
D9975	Physical diagnosis and assessment

SPRING TERM

D9603, D9621, D9625, D9637, and D9644 are offered in the spring term as continuations of courses offered in the autumn term.

D9632	Pediatric dentistry research (thesis)
D9678	Treatment planning and case review
D9900	Research methodology and biostatistics
D9901	Cariology
D9903	Human development and Genetics
D9913	Oral Radiology
D9920	Oral Histology and embryology
D9923	Pharmacotherapeutics
D9940	Environmental hazards and materials management

AUTUMN TERM

D9633 and 9645 are offered in the autumn term as continuations of courses offered in the first year.

D9604	Advanced clinical practice in pediatric dentistry
D9608	Hospital pediatric dentistry
D9612	Care of children with special health care needs
D9626	Advanced interceptive orthodontics seminar
D9628	Preventive and interceptive orthodontic clinic
D9638	Advanced seminar in pediatric dentistry
D9653	Clinical teaching preceptorship
D9676	Basic clinical pediatrics

SPRING TERM

D9605, D9609, D9613, D9629, D9634, D9639, D9646, and D9654 are offered in the spring term as continuations of courses offered in the autumn term.

D9650	Pediatric anesthesiology rotation
D9679	Treatment planning and case review
D9680	Practice management

Courses of Instruction

The University reserves the right to withdraw or modify the course of instruction or to change instructors as may be necessary.

Pediatric Dentistry (Listing of department and interdepartmental courses)

D9600x. Pediatric dental theory: technique and practice
Professor Rath.

Conferences, visual education and laboratory instruction on basic concepts of operative procedures, pulp therapy, and space management.

D9602x-D9603y, D9604x-D9605y. Pediatric dentistry clinical practice I (first year); Advanced clinical practice in pediatric dentistry II (second year)

The Staff.

Supervised clinical practice of comprehensive and episodic pediatric dental care, including; diagnosis, treatment planning, preventive therapeutics, restorative care and surgical treatment for healthy, medically compromised, and handicapped children and adolescents.

D9608x-D9609y. Hospital pediatric dentistry

Professor Troutman.

An orientation to hospital dental practice, including all procedures required to provide comprehensive dental care under general anesthesia in the hospital operating room. Students become familiar with hospital record documentation and hospital protocol.

D9612x-D9613y. Care of children with special health care needs.

Professor Troutman and the staff.

Dental care is provided for children with neurologic handicaps, congenital deformities such as heart disease and syndromes and children with chronic diseases such as diabetes, and HIV disease. Care is provided in a hospital setting.

D9620x-D9621y, D9628x-D9629y. Preventive and interceptive orthodontic clinic I and II

Professor Guerra.

Theory and application of preventive and interceptive orthodontic techniques for the pediatric and adolescent patient, including cephalometric and related diagnostic evaluation.

D9624x-D9625y, D9626x-D9627y. Interceptive orthodontics seminar (first year); Advanced seminar in orthodontics (second year)

Professor Guerra.

Seminars based on current and relevant literature. Topics include: orthodontic records, diagnosis, treatment planning, appliance design, and techniques.

D9632x-D9633x-D9634y. Pediatric dental research
Professor Rath.

The graduate student conducts an investigation in an approved area of interest in the field of pediatric dentistry, resulting in a publishable paper.

D9636x-D9637y. Pediatric dentistry seminar—scientific basis for clinical practice

Professor Troutman and the staff.

Prominent individuals in the field of pediatric dentistry present two-hour seminars on various contemporary topics.

D9638x-D9639y. Advanced seminar in pediatric dental practice

Professor Troutman and the staff.

Seminar on contemporary pediatric dentistry topics.

D9643x-D9644y. Review of the pediatric dental literature I

Professors Hills and Davis.

A Seminar review of the American Board of Pediatric Dentistry Reading List.

D9645x-D9646y. Review of pediatric dental literature II

Professors Hills and Davis.

A seminar review of the classic and current literature in pediatric dentistry

D9650y. Pediatric anesthesiology

The staff (Department of Anesthesiology).

A one-month rotation conducted by faculty of the Division of Pediatric Anesthesiology. Airway management and anesthetics are included.

D9653x-D9654y Clinical teaching proceptorship

The staff.

Students are guided in the clinical instruction of D.D.S. candidates.

D9975x. Physical diagnosis and assessment

The staff.

A series of lectures and demonstrations by the staff Oral and Maxillofacial Surgery. Topics include taking a complete medical history, performing a physical examination, interpretation of laboratory and other clinical data, risk assessment, and diagnosis.

D9676x Basic clinical pediatrics

The staff (Department of Pediatrics).

A comprehensive overview of basic pediatric medicine

D9678y-D9679y. Treatment planning and case reviews

The staff.

Students are guided in the consideration of treatment planning options and treatment plans and outcomes of treatment are discussed.

D9680y Practice management

The staff.

Given in alternate years. Dental care delivery systems, efficient modes of practice, financial planning, and career opportunities in pediatric dentistry are presented.

D99.. courses are listed under Dental Science Core and interdepartmental courses.

POSTDOCTORAL PROGRAM IN PERIODONTICS

The full-time program in periodontics prepares the dentist for the specialty of periodontics, either in private practice or in academics. Although it is strongly clinical in emphasis, the program encourages participation in research and affords the interested student the opportunity for more intensive research training. The program consists of courses in the theory and practice of periodontics and in the basic biologic and related medical sciences. Many schools of thought are represented in the faculty and in the frequent guest lecturers, thus providing a variety of approaches to

clinical problems. An atmosphere of intellectual, scientific inquiry is nurtured, and the student is encouraged to apply fundamental biological knowledge and judgment to clinical problems. Students are also given an opportunity to assist in clinical instruction of undergraduate dental students. This thirty-month program meets the educational requirements of the American Academy of Periodontology and the American Dental Association.

First Year

AUTUMN TERM

- D9700 Clinical practice in periodontics
- D9708 Periodontal therapy literature
- D9712 Basic periodontal literature
- D9720 Treatment planning in periodontics I
- D9726 Occlusion, function of the jaws and temporomandibular joint, with special reference to periodontics
- D9727 Histology and histopathology of periodontal structures
- D9732 Implantology
- D9734 Current periodontal literature
- D9752 Practicum in clinical and classroom teaching
- D9760 Introduction to periodontal therapy
- D9765 Adjunctive orthodontics
- D9770 Periodontal microbiology and immunology
- D9745 Scientific writing
- D9905 Oral medicine and clinical oral pathology
- D9911 Functional anatomy of the head and neck
- D9912 Anatomy of the head and neck
- D9915 Psychiatry and psychosomatic medicine, and their interrelationships with dentistry
- D9922 Physiology
- D9930 Bone chemistry and the mineralization process
- D9951 Periodontal wound healing

SPRING TERM

- D9701, D9709, D9721, D9733, D9735, D9753, D9761, D9766, and D9952 are offered in the spring term. They are continuations of courses offered in the autumn term.
- D9740 Treatment planning in periodontics II
- D9748 Management of the medically compromised patient
- D9900 Research methodology and statistics
- D9901 Cariology
- D9913 Radiology
- D9920 Histology and embryology
- D9923 Pharmacotherapeutics
- D9940 Environmental hazards and materials management
- D9965 Microbiology and immunology

Second Year

AUTUMN TERM

- D9702, D9710, D9722, D9736, D9741, and D9754 are offered in the second year. They are continuations of courses offered in the first year.
- D9714 Periodontal surgical conference
- D9716 Journal Club

- D9729 Restorative dentistry related to periodontics
- D9780 Implantology literature review
- D9916 Temporomandibular disorders and orofacial pain

SPRING TERM

- D9703, D9711, D9715, D9717, D9723, D9730, D9737, D9755, and D9781 are offered in the spring term. They are continuations of courses offered in the autumn term.
- D9775 Ethical issues in periodontics
- D9784 Pain and anxiety control

Third Year

AUTUMN TERM

- D9772, D9763, D9776, D9738, and D9756 are continued courses.
- D9731 Practice management in periodontics
- D9786 Pain and anxiety control—lectures
- D9787 Pain and anxiety control—clinical practice
- D9790 Independent study

SPRING TERM

- D9773, D9777, D9739, D9757, D9786, D9787, and D9791 are continued courses.
- D9785 Biologic principles of periodontal therapy

Courses of Instruction

D9700-D9701, D9702-D9702. Clinical practice in periodontics and implantology

Professors Schwartz, Wang and the staff.

Clinical practice in diagnosis, treatment planning, and all the phases of periodontal therapy and osseointegrated implants. Exposure to a wide variety of surgical procedures, various occlusal concepts, simple orthodontic procedures, temporary stabilization methods, and methods of patient management. Emphasis on motivating the patient to practice oral hygiene. Five clinic sessions per week in the first year and seven per week in the second and third years.

D9708-D9709, D9710-D9711. Seminars in periodontics: periodontal therapy

Professor Grbic, first year; Professor Schwartz, second year. Review of the literature in periodontal therapy. Students become familiar with the historical development of periodontal therapeutic techniques by exploring the literature, reading the classic articles, and critically analyzing the pertinent research. One hour per week for two years.

D9712. Seminars in periodontics: basic periodontal literature.

Professors Grbic, Klein and the staff.

Review of the basic literature in periodontics including classic articles on periodontal history, epidemiology, histology, varieties of periodontal disease, and the etiology, immunology and pathogenesis of periodontal diseases. Two and one-half hours per week for one semester.

D9714-D9715, D9763. Periodontal surgical conference.

Professors Wang, West, and Langer.

Seminars in periodontal surgical problems: analysis of student case presentations; discussion of newly introduced techniques. One hour per week for two years.

D9716-D9717. Seminars in periodontics: journal club
Professors Wasserman and Karabin.

A seminar series based on selected articles from current journals. Critical analysis of the assigned papers requires research and review of pertinent literature. The objective is to develop habits of critical reading of the scientific literature. One hour per week for one year.

D9720-D9721, D9722-D9723. Treatment planning in periodontics (I)

Professors Wasserman, Geiger and the staff.

Interdisciplinary seminar in planning treatment for patients with advanced periodontitis. Students present cases, and treatment plan is discussed by students and faculty from divisions of Periodontics and Prosthodontics. One hour per week for two years.

D9726. Occlusion, function of the jaws and temporomandibular joint, with special reference to periodontics
Professor Tannenbaum.

Seminar review of the relevant literature and discussion of examination, diagnosis, and treatment of occlusal factors in the periodontal diseases. One hour per week for one semester.

D9727. Histopathology. Histology and histopathology of periodontal structures

Professor Grbic.

Study of the microscopic aspects of periodontium in health and disease as they relate to clinical findings. Two hours per week for one semester.

D9729-D9730. Restorative dentistry related to periodontics

Professor Grayson and the staff.

Lectures, including visiting lecturers: Restorative dentistry problems and solutions related to the periodontal diseases. One hour per week for one year.

D9731. Practice management in periodontics

Professor Schwartz.

Seminar: All business aspects of periodontal practice are discussed in detail, including establishing or buying into a practice, hiring and managing staff, purchasing insurance, planning a new office, and establishing office systems. One hour per week for one semester.

D9732-D9733. Implantology

Professors Wang, West and Langer.

Lectures, including visiting lecturers, on the diagnosis, treatment planning and placement of osseointegrated implants, including history of implants, relevant histopathology, surgical technique and prosthetic implications. One and one-half hours per week for one year.

D9734-D9735, D9736-D9737, D9738-D9739. Current periodontal literature

Professors Lamster, Schwartz and Karabin.

Summaries and critiques of articles in recent periodontal literature with emphasis on critical evaluation of experimental assumptions, methods, results, and conclusions. One hour per week for three years.

D9752-D9753, D9754-D9755. Practicum in clinical and classroom teaching

Professor Schwartz.

Practice in the teaching of periodontal concepts and proce-

dures to undergraduate dental students. Two and one-half hours per week for three years.

D9760-D9761. Introduction to periodontal therapy
Professors Fine and Schwartz.

Seminars in the currently accepted therapies for the periodontal diseases, including rationale, techniques, and alternatives. One hour per week for one year.

D9765-D9766. Adjunctive orthodontics

Professor Geiger.

Seminars in the theory and practice of minor tooth movement as adjunctive therapy in the treatment of periodontal disease. One hour per week for one year.

D9770. Periodontal microbiology and immunology
Professor Lamster.

Introduction and in-depth review of the microbiology and host response in the periodontal diseases. One hour per week for one semester.

D9745. Scientific writing

Professor Schwartz.

Seminars and guest lectures on the criteria of good scientific writing, including selected reading and critical review of papers. One hour per week for one semester.

D9740-D9741. Periodontal treatment planning (II)
Professor Tannenbaum.

Seminars in the logical creation of a diagnosis and treatment plan for patients with periodontal disease. One hour per week for two semesters.

D9748. Management of the medically compromised patient

Professors Schwartz and Fine.

Seminars and guest lectures on systemic conditions and medications, their effects on periodontal disease and treatment, including the special needs of the geriatric patient. One hour per week for one semester.

D9780-D9781. Implantology literature review

Professor Langer.

Critical review of of publications related to osseointegrated implants. One hour per week for one year.

D9775. Ethical issues in periodontics

Professor Nisselson.

Seminar. Scenarios involving difficult ethical issues are presented by the course director and by the class; alternative choices and courses of action are discussed. One hour per week for one semester.

D9784, D9786, D9788. Pain and anxiety control

Staff, in cooperation with Divisions of Oral Surgery and Anesthesiology.

Lectures in the theory and practice of pain and anxiety control, including the use of inhalation and parenteral conscious sedation analgesic techniques, possible complications, and management of emergencies. New course. Hours not yet determined.

D9787, D9789. Pain and anxiety control

Staff, in cooperation with Divisions of Oral Surgery and Anesthesiology.

Clinical observation and practice in techniques of pain and anxiety control, including anesthesiology rotation. New course. Hours not yet determined.

D9790-D9791. Independent study

Professors Lamster, Schwartz and the staff.

By the second semester of the second year students are expected to select a topic for independent study under the supervision of a mentor. They will perform the necessary laboratory, library, or field research during the third year and submit a detailed written research report as a prerequisite for graduation.

D9785. Biologic principles of periodontal therapy

Professors Karabin and Oshrain.

Review of the basic biologic foundations of the periodontal diseases and their management, in preparation for Part I of the American Board of Periodontology examination. One hour per week for one semester.

D9951-D9952. Periodontal wound healing

Professor Lamster.

A review of the basic mechanisms of wound healing, and analysis of the literature concerning wound healing following periodontal surgical procedures. One hour per week for one year.

POSTDOCTORAL PROGRAM IN PROSTHODONTICS

The two-year, full-time board-qualifying program in prosthodontics leads to a Certificate of Training approved by the Commission on Accreditation and prepares the student for a specialty practice, teaching, and/or research. The program is integrated to include all disciplines, that is, complete and removable prosthodontics, fixed prosthodontics, implant prosthodontics and maxillofacial prosthetics.

The program includes instruction in basic and applied sciences, as well as advanced theory and practice of prosthodontics and related areas of dentistry, through lecture courses, seminars, reading assignments, laboratory exercises, and clinical practice demonstrations. Emphasis is on diagnosis, treatment planning and application of treatment modalities.

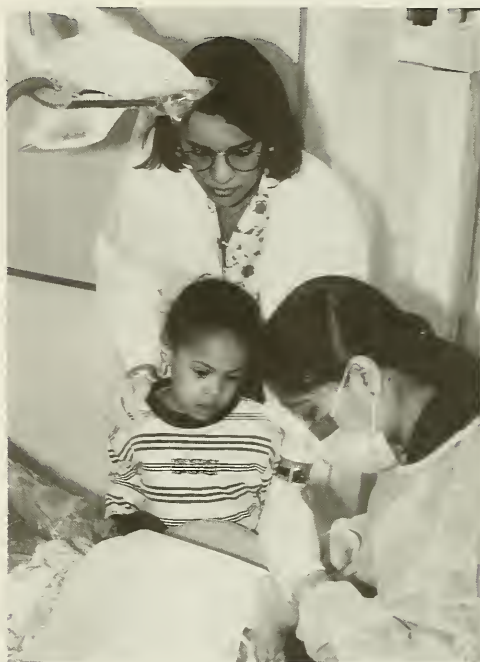
The student also gains experience in clinical instruction of undergraduate dental students and research. If the student wishes to apply to the Graduate School of Arts and Sciences for an M.A. or Ph.D. degree, additional time in residence beyond two years is necessary. The opportunity to spend a third year with a PGY-3 stipend at Columbia and an affiliated institution in maxillofacial prosthetics exists for qualified individuals.

Complete descriptions of the following courses are given under Courses of Instruction, below.

First Year

AUTUMN TERM

- D9800 Clinical practice in prosthodontics
- D9808 Seminars in prosthodontics
- D9813 History of prosthodontics/literature review
- D9820 Prosthodontic treatment planning
- D9905 Oral medicine and clinical oral pathology
- D9911 Functional anatomy of the head and neck
- D9912 Anatomy of the head and neck
- D9915 Psychiatry and psychosomatic medicine
- D9916 Temporomandibular and orofacial pain
- D9922 Physiology
- D9930 Bone chemistry and the mineralization process



SPRING TERM

D9801 and D9811 are offered in the spring term. They are continuations of courses offered in the autumn term.

- D9814 History of prosthodontics/literature review
- D9830 Thesis
- D9840 Occlusion
- D9900 Research methodology and statistics
- D9901 Cariology
- D9903 Orofacial growth and development
- D9913 Histology and embryology
- D9923 Pharmacotherapeutics
- D9935 Dental materials
- D9965 Microbiology and immunology

SUMMER SESSION

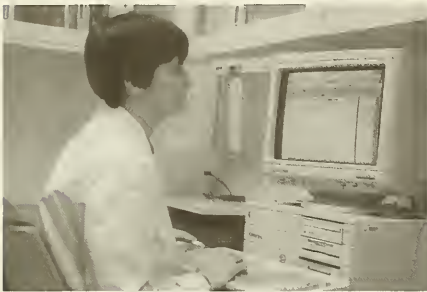
D9802, D9812, D9815 and D9831 are offered in the summer session. They are continuations of courses offered in the autumn and/or spring terms.

Second Year

AUTUMN TERM

D9803, D9811, D9816, D9832 and D9865 are offered in the autumn term of the second year. They are continuations of courses offered in the first year.

- D9722 Treatment planning in periodontics
- D9729 Restorative dentistry
- D9821 Prosthodontics treatment planning
- D9842 Cephalometrics in prosthodontics
- D9865 Predoctoral prosthodontics instruction preceptorship



SPRING TERM

D9723, D9730, D9804, D9815, D9833 and D9866 are offered in the spring term. They are continuations of courses in the autumn term.

D9216 Pulp biology

D9844 Clinical rotation Harlem Hospital

D9845 Clinical rotation Bronx V.A. Hospital

Courses of Instruction

D9800x-D9801y, D9802z, D9803x-D9804y. Clinical practice in prosthodontics

Professor Toothaker and the staff.

Supervised clinical experience in diagnosis, treatment planning, and all phases of prosthodontic therapy. *At least six clinic sessions a week each semester.*

D9808x-D9809y, D9810z, D9811x-D9812y. Seminars in prosthodontics

Professor Toothaker and the staff.

A comprehensive discussion of basic and advanced techniques in fixed and removable prosthodontics and maxillofacial prosthetics. *Three hours per week each semester.*

D9813x-D9814y-D9815z, D9816x-D9817y. History of prosthodontics and literature review

Professor Toothaker and the staff.

A series of seminars in which classic prosthodontic literature and articles from current journals are critically analyzed. The objective is to develop habits of critical interpretation and to familiarize the student with past and present prosthodontics issues and concepts. *One hour per week each semester.*

D9820x, D9821x. Prosthodontic treatment planning

Professors Toothaker, White and LaSota.

A special effort is made to assimilate the didactic and theoretic aspects of prosthodontics presented in the other seminars and their application to patient diagnosis, treatment, recall, maintenance and, failures. Formal case presentations are made by assigned faculty members and students. *One hour per week each semester.*

D9830y, D9831z, D9832x-D9833y. Thesis

Professors Toothaker, Wright and McAlarney.

An investigation of an approved area of interest in the field of prosthodontics, with the results presented in the form of a written thesis and oral presentation that should be completed and presented at least one month before the end of the program.

D9840y. Occlusion and instrumentation seminar

Professor Toothaker and White.

A comprehensive review of the basic concepts of occlusion in seminar form to provide a didactic component to augment the students' clinical experience with occlusion. *One two-hour session weekly.*

D9844. Clinical rotations at Harlem Hospital

Professors Toothaker and White.

Prosthodontic procedures within a hospital dental service emphasizing prosthodontic care of selected patients.

D9845y. Clinical rotations at the Bronx V.A. Hospital

Professors Toothaker, Wright, Schweiger and Sabol.

Prosthodontic procedures within a hospital dental service, emphasizing care of the edentulous patient and hospital protocol.

D9864z, D9865x-D9866y. Predoctoral prosthodontic instruction preceptorship

Professors Toothaker, Wright, Phillips and the staff.

Instruction of predoctoral students in clinical prosthodontics to expose the postdoctoral student to a career in teaching. *One hundred and sixty clinical hours.*

MAXILLOFACIAL PROSTHETIC RESIDENCY PROGRAM

The Maxillofacial Prosthetic Residency at Columbia University School of Dental and Oral Surgery is a twelve-month joint program with the Columbia-affiliated Bronx V.A. Medical Center, a modern, well-equipped tertiary care cancer center. The program has a full-time director and three part-time, Board-certified faculty members.

About 75-80 percent of the resident's time is spent in the clinic. The remaining time is devoted to conferences and literature review. Rotations are scheduled with Head and Neck Surgery, Plastic Surgery, Oral and Maxillofacial Surgery, Radiation Oncology, Oral Pathology and Medical Oncology. The resident is taught the multidisciplinary approach to treating patients with acquired and congenital defects, including intraoral and extraoral defects. There is a special emphasis on the selected use of implants in maxillofacial prosthetics.

The program offers a stipend with insurance benefits and leads to a certificate. Applicants should be licensed in a U.S. state. To apply send an updated curriculum vitae and two letters of recommendation to the attention of Robert F. Wright, D.D.S., Director, Division of Prosthodontics and Maxillofacial Prosthodontics Program, Columbia University, School of Dental and Oral Surgery, 630 West 168th Street, New York, N.Y. 10032. A \$35.00 application fee is required, made payable to Columbia University, Division of Prosthodontics. Additional information may be obtained at the same address.

FELLOWSHIPS AND POSTDOCTORAL PROGRAMS IN BASIC SCIENCES

In recognition of the need for advanced education in the basic sciences and to qualify graduates in dentistry as teachers and investigators, fellowships are offered for study and research in anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology. Fellows are normally enrolled in the Graduate School of Arts and Sciences of the University as prospective candidates for the degree of Doctor of Philosophy.

Appointments are made on a yearly (twelve-month) basis, with opportunity for renewal or extension at the discretion of the chairman of the department in which the student is enrolled. The specific objectives of the program are to furnish more complete preparation for careers in dental education and to offer training in investigation so that research in important unsolved problems indigenous to dental science will be extended. Students may apply also to the United States Public Health Service for financial aid.

The formal instruction is elected from courses offered in the Graduate School of Arts and Sciences, the School of Dental and Oral Surgery, the College of Physicians and Surgeons, and the School of Public Health. Each fellow must formulate and carry out, under supervision, an original investigation. During the period of appointment, fellows are expected to remain in residence and devote their entire time to study and research. In order to maintain contact with clinical dentistry, the student may attend clinics in the School of Dental and Oral Surgery and will be given an opportunity to participate in undergraduate teaching.

Fellowship Application

To apply for a fellowship in the basic sciences for dentists, the applicant should obtain, from the Postdoctoral Admissions Office, School of Dental and Oral Surgery, 630 West 168th Street, VC9-219, New York, N.Y. 10032, an application form that should be completed and returned to the same address. Applicants should also arrange for each college or university they have attended to send two official transcripts of their records to the Postdoctoral Admissions Office. A personal interview with the applicant is required. The applicant must be accepted not only by the School of Dental and Oral Surgery but also by the chairman of the specific basic science department within which he or she wishes to study. Applications may be submitted at any time. Appointments are made as vacancies occur.

POSTDOCTORAL FELLOWSHIP PROGRAM IN GENERAL DENTISTRY AND RESIDENCY PROGRAMS

This is an Advanced Education in General Dentistry (AEGD) program developed as an extension of the School's regular curriculum. Each fellow has the opportunity to expand clinical skills, and if an SDOS graduate, to continue in the previously elected Area of Concentration. The fellowship program is designed to prepare graduates for careers in general dentistry and as future leaders in the delivery of dental care.



A preclinical lab, circa 1930s.

A primary objective of the program is to allow fellows to participate in a vertically integrated practice mode that utilizes the preceptorship approach to clinical instruction. Fellows participate with faculty in a group practice setting. Faculty members provide patient care and serve as mentors and preceptors for the fellows, as well as preceptors for undergraduate students.

The Postdoctoral Fellowship Program in General Dentistry offers the recent dental graduate increased clinical and didactic experience in all areas of dentistry, including hospital protocol and management, research, public health, dental teaching techniques, and the behavioral sciences.

In addition to the above the School has the following hospital-based residency programs:

1. Oral and Maxillofacial Surgery
2. Pediatric Dentistry
3. General Practice

For information about these programs contact the Office of Postdoctoral Education, School of Dental and Oral Surgery, 630 West 168 Street, VC9-219, New York, N.Y. 10032.

POSTDOCTORAL CERTIFICATE PROGRAMS

The School is authorized to grant certificates of training in the specialties of dentistry. Programs for the certificate of training include advanced study in the clinical and basic sciences of dentistry. At present, programs are offered to qualified graduates in dentistry who wish to prepare for specialization in endodontics, orthodontics, pediatric dentistry, periodontics, and prosthodontics. These programs are described in detail under Postdoctoral Programs in Dental Specialties. For a description of the combined postdoctoral M.A. program, see below.

THE GRADUATE PROGRAM IN DENTAL SCIENCE (M.A. DEGREE)

The School of Dental and Oral Surgery offers a graduate research training program exclusively for students in its postdoctoral clinical programs. Through this program, a limited number of selected students have the opportunity to earn the M.A. degree from the Graduate School of Arts

and Sciences. The program is primarily intended for those clinical trainees whose career goals include participation in academic teaching programs and institutional research programs. Because there is interaction between the program and clinical training, students become highly trained dental specialists capable of incorporating new biological concepts in treatment, as well as dental investigators.

PROGRAM OF STUDY

The research training program is combined with the clinical training program in order to offer the maximum opportunity for interaction between clinical and research fields. Completion of two "Residence Units," including 30 academic credits, is required for the MA degree. The two kinds of training are combined and spread over a thirty- to thirty-six month period. Students receiving training at certain affiliated hospitals may be eligible for admission, based on the recommendation of the director of the relevant clinical program at Columbia. All graduate work and research must be done at the University.

Students are expected to indicate a specific area of research specialization when they apply for admission or during the first term. Based on this selection, an appropriate faculty committee will, with the student's participation, map out the academic program. Of the 30 required graduate credits, approximately one-third consists of courses

required of all students and one-third of thesis-related courses. The remaining one-third consists of original laboratory or clinical research, under the supervision of an appropriate member of the faculty, and thesis preparation. The research segment of the training is expected to extend over a three-term period at least.

ADMISSION

Admission is limited to students who have also been accepted for a postdoctoral certificate program in one of the specialties. In addition to completion of dental training, a strong background in the basic sciences is essential. Applicants must submit the test results of the Graduate Record Examination. Applicants may be asked to visit for an interview by faculty members. The program is highly selective, and only a few students therefore can be admitted each year.

CONTINUATION AND COMPLETION

Because the purpose of this program is research training of clinical specialists, students must maintain satisfactory performance in their clinical training as well as in their graduate studies. While each program has its own set of requirements, the structures are interrelated. Both must be completed at the same time, and in no event will the M.A. degree be granted separately.



Registration, Expenses, Financial Aid, and Other Information

REGISTRATION

Before attending classes, each student must register with the Academic Records & Registration division of the Office of Student Administrative Services during the registration period listed in the Academic Calendar. Late registration requires the approval of the dean of the School and payment of a late fee (see Fees below). Incoming students are notified of the date, time, and place through information provided in the admissions packet. Thereafter, this information is sent to students by the Student Administrative Services office. This office, located in room 141 of the Black Building, provides registrar and bursar services. Daily hours are 9:00 a.m. to 4:30 p.m., Mondays, Wednesdays, Thursdays, Fridays; 9:00 a.m. to 6 p.m., Tuesdays.

All students are asked to give Social Security numbers when registering in the University. Students who do not have Social Security numbers should obtain them from their local Social Security office well in advance of registration. International students should consult the International Students and Scholars Office (ISSO), 524 Riverside Drive, Suite 200 (mailing address: International Students and Scholars Office, Columbia University, Box 524 Central Mail Room, New York, NY 10027), for further information.

Students who are not citizens of the United States and who need authorization for special billing of tuition and/or fees to foreign institutions, agencies, or sponsors should go to the ISSO with two copies of the sponsorship letter. Special billing authorization is required of students whose bills are to be sent to a third party for payment.

Columbia University policy mandates that all students in the Health Sciences must prove immunity to measles (rubeola), mumps, and rubella (MMR) in order to register for classes. The only acceptable proof is a copy of the laboratory results of titers (blood tests) that clearly document immunity to these diseases. Proof must be sent to Columbia University Student Health Service-MMR, 60 Haven Avenue, New York, N.Y. 10032.

Other Courses

Certificate and degree candidates in good standing who are enrolled for a full-time program in the current term may register for one or two courses (except during Summer Session) in any division of the University (excluding Barnard College and Teachers College) without charge by filing a formal change of program application approved by the Assistant Dean for Student Affairs. These forms are then filed in the office of Academic Records & Registration (Black Building, room 141). Consult the office of Academic Records & Registration for autumn and spring change of program dates.

GRADING SYSTEM AND REQUIREMENTS FOR PROMOTION AND GRADUATION

D.D.S. Program

The following grading system is used: A, excellent; B, good; C, fair; F, failure; P, pass; H, honors.

There are four standing faculty committees concerned with students' academic performance. These committees are the First-Year Class Committee, the Second-Year Class Committee, the Third-Year Class Committee, and the Fourth-Year Class Committee. These committees meet periodically during each academic year to review student performance and to make decisions related to course failures and to promotions. A student may be admitted to the second, third, or fourth year of the dental curriculum only upon successful completion of all courses and recommendation of the officers of instruction under whom the student has studied during the preceding year. Students are classified for promotion or readmission under the following categories: (1) recommended for advancement; (2) recommended for readmission to the same class; (3) not recommended for advancement or readmission to the same class.

Course failures in all years of the curriculum must be corrected according to the directives of the appropriate class committee. At the discretion of the class committee, in any year of the curriculum, students may be requested to repeat the year or may be dismissed for poor scholarship. Each class committee may direct a student whose performance is marginal to undertake additional work to correct deficiencies and strengthen overall performance in any discipline.

Students are informed in writing of the academic decisions of each class committee. Students have the right to appeal decisions of the committees. A student who wishes to appeal may request that the concerned committee reverse or alter its decision. If the committee reaffirms the original decision, the student may direct an appeal to the Committee on Appeals of the School.

The School of Dental and Oral Surgery reserves the right to dismiss, or to deny admission, registration, readmission, or graduation to any student who in the judgment of the School is determined to be unsuited to the study or the practice of dentistry.

The degree of Doctor of Dental Surgery (D.D.S.) is awarded upon satisfactory completion of the prescribed curriculum.

The Postdoctoral Certificate Programs

The following grading system is used: A, excellent; B, good; C, fair; F, failure; YC, year course; P, pass.

To be awarded the certificate of training, a candidate must fulfill the following requirements to the satisfaction of the Postdoctoral Committee. The candidate must: (1) complete the prescribed courses and any required thesis; students wishing to be exempted from any of the prescribed courses may request a placement examination in the discipline involved, and the time made available by such exemptions will be planned and supervised by the Program Director for productive utilization; (2) pass prescribed written, oral, or practical examinations at the end of the period of residence; (3) attend special courses, when assigned, at hospitals or institutions affiliated with Columbia University but separate from the Medical Center; and, (4) satisfy the Postdoctoral Committee that he or she has completed all the specified requirements, both clinical and academic, for the certificate of training. Any postdoctoral student receiving marginal grades in more than one subject in any one academic year may be advanced or promoted only upon special action and recommendation of the Postdoctoral Committee.

FEES

The following fees are prescribed for the D.D.S. program and each of the postdoctoral programs. Fees are subject to change at any time at the discretion of the trustees. Fees for partial programs are assessed by the registrar as provided by the University statutes.

University charges such as tuition and fees, residence halls, and board plans are due and payable in full by the date announced before the beginning of each term. The full amount of any charge may be paid when due without penalty or payment may be made in installments. If installment payments are made, a **FINANCE CHARGE** is assessed on amounts not paid by the due date on the initial bill received prior to registration and thereafter as indicated on subsequent monthly bills. In either event, however, the student is required to sign a Retail Installment Credit Agreement at the time of registration which sets forth the terms and conditions of payment. All charges must be paid by the end of the term.

It is the policy of the University to withhold diplomas, certificates, and transcripts until all financial obligations have been met. Candidates for graduation are urged to pay their bills in full at least one month prior to graduation.

In the event a diploma, certificate, or transcript is withheld because of an unpaid bill, a student will be **required** to use a certified check, money order, or cash to release any of the aforementioned documents.

Tuition and Fees

Current tuition and fee information is available from the Office of Student Financial Planning. Please call (212) 305-4100.

The student health service fee contributes to the cost of operating the Student Health Service. The hospital insurance fee pays the annual premium of the Associated Hospital Service of New York. Participation in these programs is compulsory for all full-time students; students who already carry hospital insurance of comparable coverage will be charged the health service fee only. Part-time students are encouraged to participate in the combined health plan. Upon payment of additional fees, students can acquire hospital insurance for their dependents and the latter are eligible to receive the benefits of the health service program. For further information on dependent coverage, students should consult the Student Health Service, which holds daily office hours and is on the street level of Bard Haven Tower 1 (60 Haven Avenue). Other fees include disability insurance and instrument insurance.

All entering students are required to have a physical examination by their physician before matriculation.

Application Fee

Application for admission	\$50
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Late Registration Fees

During late registration	\$50
After late registration	100

Special Fee

International Student Charge	\$95
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Fees for Repeated Courses

A student who is required to repeat the work for any one year must pay the full tuition and fees. Repeated courses are paid on a per point basis.

Withdrawal and Adjustment of Fees

With the passage of the Higher Education Amendments of 1992 (Public Law 102-325), the University is required to implement a pro rata refund policy for students who do not register or who withdraw or otherwise fail to complete an enrollment period. Refunds are a percentage of charges (including tuition, dining, and housing) assessed the student based on the date of the student's last day of attendance (separation) as reported by the dean of the student's school.

All students will be charged a withdrawal fee of \$75.

A refund calculation will be based on the last day of attendance; however, a student may be charged for services (e.g., housing, dining) utilized after the last day of attendance. These charges should not be paid with Title IV funds.

Certain fees are not refundable: fees for services used prior to withdrawal, for materials and equipment purchased, for services that continue to be available after withdrawal, and fees paid to outside entities generally will not be refunded. Fees not subject to refund: health service, medical insurance/Blue Cross, catastrophic insurance, course-related fees (labs, etc.), dental kit, microscope, case books, disability insurance, malpractice insurance, materials fee, orientation fee, international services charge, late registration fee, late payment fee, finance charges, computer fee, withdrawal fee.

Students will not be entitled to any portion of a refund until all Title IV programs are credited and all outstanding charges have been paid.

Refunds will be credited in the following order: Federal Stafford Loans, Federal Unsubsidized Stafford Loans, Federal Supplemental Loan to Students (SLS), Federal Perkins Loan, other Title IV programs, non-title IV funds, and, finally, any remaining credit balance to the student.

The refund percentage is as follows (prorated for calendars of different durations):

1st week	100% refund
2nd week	90%
3rd week	80%
4th week	80%
5th week	70%
6th week	60%
7th week	60%
8th week	50%
9th week	40%
After 9th week	—

Application or Renewal of Application for Degrees or Certificates

Degrees and certificates are awarded three times a year—in October, February, and May. A candidate for any Columbia degree or certificate must file an application with the Office of Academic Records & Registration, room 141 Black Building. The last day to file for an October degree is

August 1; for February degree, December 1; and for a May degree, February 1. (When the application date occurs on a Saturday or Sunday, the deadline becomes the next business day.) No name changes will be accepted after the application deadline. Fourth year students usually apply during their last registration.

If the student fails to earn the degree by the conferral date for which he or she has made application, the student may renew the application for the next conferral date.

Diplomas

There is no charge for diploma preparation except in the following instances. A \$50 fee is imposed for processing replacement diplomas after a student has graduated. Applications for replacement diplomas may be requested by calling the Graduation & Degree Audit at the Morningside Campus, (212) 854-3937.

Name Changes

Students may change their name of record while currently enrolled in the University. There is no charge for this service. After graduation and/or attaining non-current status, students' names become a permanent part of their historic academic record and can no longer be changed. Questions about name changes should be directed to the School's division of the Office of Academic Records and Registration, 141 Black Building.

Transcripts and Certification

The Family Educational Rights and Privacy Act of 1974 as amended prohibits the release of educational records by institutions without the specific written consent of the student or alumnus. Students or alumni may request copies of their records by writing to the Office of Student Information Services, Room 141, Black Building, 630 West 168th Street, New York, N.Y. 10032. Please include name, ID number, schools, and dates of attendance in the letter. Students may also come to 141 Black and order records in person.

There is a charge of \$5 for official transcripts (\$1 for each additional copy ordered at the same time); checks should be payable to Columbia University. There is no charge for intra-University copies. Processing time during nonpeak periods is three to five business days, but students should allow ten days for mail delivery.

Student certification forms may be submitted in person or by mail to the above address. There is no charge for verification of attendance and degree status.

ESTIMATED EXPENSES

D.D.S. Program

Books. The approximate cost of books will be: in the first year, \$760; in the second year, \$630; in the third year, \$400; in the fourth year, \$200. Book lists are posted for each class during registration week. Books may be purchased from the Medical Center Bookstore.

Instruments and Supplies. Each student must purchase from the University a package of instruments necessary for preclinical and clinical dental instruction. The estimated cost of these instruments for students entering in September 1993 was approximately \$11,200, and arrangements have been made to spread the \$11,200 expenditure over the four-year period. In addition to the purchased instruments, students are provided with certain clinical instruments for use during the third and fourth years, at a rental fee of \$50 a year. Rental equipment assigned to students must be returned. A charge is made for loss, breakage, and abnormal wear.

Microscopes. During the first year microscopes are provided by the School for a rental of \$200 a year. If a student prefers to provide his or her own microscope, the student must have it approved by the Department of Anatomy. It is recommended that the microscope be of standard make equipped with: (a) quadruple nose piece; (b) Abbe or variable focus condenser; (c) 4x, 10x, 43x objectives; (d) 96x oil immersion lens; (e) 10x wide field eye piece; (f) mechanical stage; (g) attached lamp; (h) carrying case.

The cost of a new microscope ranges from \$600 to \$1,000, and of a reconditioned microscope from \$200 to \$500. Arrangements for approval and for purchase or rental should be made before registration for the opening term.

Variations in these estimated costs may be necessary because of price fluctuations or new developments. These figures are presented as a guide for student planning. Students must *not* present checks made in advance and based on these figures. Details are sent immediately prior to registration.

Lockers. Each entering student is assigned a locker; the student must use a combination lock as prescribed by the School.

Postdoctoral Certificate Programs

Since the prices of tuition, books, and instruments may fluctuate, please contact the Office of the Dean for Postdoctoral Affairs at (212) 305-2425 for information on current tuition and fees.

FINANCIAL AID

The Office of Student Financial Planning administers financial aid for the College of Physicians and Surgeons and the School of Dental and Oral Surgery.

Each class is assigned to a Financial Aid Officer who will determine need and financial aid packages and will work closely with that class throughout dental school. We have an integrated computer system, and all of our staff are prepared to answer routine questions. Financial aid officers will have posted walk-in hours each week to handle questions that can be quickly resolved. Appointments should be made when a longer conference is needed.

Financial aid is any grant, scholarship or loan offered for the express purpose of helping a student meet educationally related expenses. Such aid is usually provided by or through the School, federal and state agencies, foundations or corporations, etc.

Grants/Scholarships are generally regarded as "gift" assistance and need not be repaid, although they may carry certain provisions to which one must adhere. Loans are borrowed monies, offered at various interest rates, which can be repaid over an extended period after the student graduates or leaves the institution.

The basic premise of our financial aid program is that the primary responsibility to pay for dental school rests with students and their families, to the extent that they are determined able to do so. While the Office of Student Financial Planning will do everything possible to assist, the School should be expected to assist only when the family is unable to meet the full cost of attendance. Since the School has very limited need-based funds available for loans and grants, students who need assistance will have to finance most of their dental education with student loans.

Careful consideration of the impact of large educational debt is critical, and our financial aid officers are available to counsel students on the implications.

An international student in the United States with an F1 or F2 student visa or with a J1 or J2 exchange visitor visa cannot receive need-based student aid from federal, state, or SDOS sources. International students who acquire permanent resident status prior to graduation will become eligible for external state and federal assistance, but not for SDOS need-based aid.

SCHOOL-ADMINISTERED SCHOLARSHIPS AND GRANTS

These scholarships and grants are awarded to needy students according to the packaging model described earlier. Of the \$617,300 awarded in 1993-94, 76% came from SDOS, and 24% came from federal sources.

Three Federal Programs from HHS

SDOS participates in three targeted scholarship programs which are usually awarded to students after the academic year has begun. Based on Congressional appropriation, the Department of Health and Human Services (HHS) makes awards to participating dental schools for the EFN, the FADHPS, and the SDS programs.

The **Scholarship for Students of Exceptional Financial Need (EFN)** is targeted for students of exceptional need, i.e. those who have zero or close to zero in financial resources, and are preferably from a group which has traditionally been underrepresented in dentistry.

The **Financial Assistance for Disadvantaged Health Professions Students (FADHPS)** program is targeted for students who come from an environment that inhibits individuals from obtaining the knowledge, skills, and abilities required to enroll in and graduate from a dental school; or must come from a family with an annual income below a level based on low-income thresholds, according to family size, published by the U.S. Bureau of the Census. In addition, a student's resources ("family contribution") must be \$5,000 or less.



The **Scholarships for Disadvantaged Students (SDS)** are limited funds targeted for essentially the same population as the FADHPS program. **There is no primary care service requirement as with EFN and FADHPS.**

SDOS Grants

These grants range from \$100 to \$4,000. Most of the School's unnamed grant funds are dedicated to this support of needy students.

Named Need-Based Grants

Named grants in varying amounts exist for currently enrolled students. They include scholarships such as the Fermi Award, the Gies Research Scholarship, the Minervini Scholarship, the Percy T. Phillips Scholarships and others.

Academic Scholarships

A number of merit-based scholarships are awarded annually by the School of Dental and Oral Surgery and may become part of a student's financial aid package. The following are examples of such scholarships.

Dean's Academic Scholarships: Two or three incoming first year students receive approximately **one-half tuition** in recognition of past academic performance and potential for unusual excellence in the profession. These scholarships are renewed for **four years** provided satisfactory academic progress and professional demeanor are maintained.

Dean's Honor Scholars: Five students with the highest academic achievement at the conclusion of Year I each receive a \$1,000 scholarship toward Year II costs in recognition of academic excellence.

The **Clark Scholarships** are sponsored by the Clark Foundation to recognize the previous and current academic achievement of students who also demonstrate financial need.

The **William J. Gies Fellowship** is funded by the William J. Gies Foundation for the Advancement of Dentistry. It is awarded yearly to the first year student judged to have the highest potential for a research career.

SDOS sponsors a number of **Research and Teaching Assistantships** for those who are interested and have the ability. These competitive positions provide \$5,000 in tuition exemption and a stipend of about \$750. The number of slots and level of tuition exemption and stipends are determined external to the School and may vary considerably from year to year.

The **Dr. Milton G. Schlesinger Award for Excellence in Research** is given annually to a student who has completed the third year with academic excellence and has meritorious research, as determined by the Research Committee of the School, in biological or clinical dental sciences.

The **Van Woert Award** recognizes the student at the end of the third year with the highest academic achievement.

Interschool Scholarships

A number of small scholarships from the University are available only to students who meet specific criteria. Contact the Office of Student Financial Planning for a complete list of these scholarships.

New York State Tuition Assistance Program (TAP)

To qualify an applicant must be a resident of New York State twelve months prior to application for funds. As of this date, awards range from a minimum of \$100 to a maximum of \$1,125 per academic year. Applications may be obtained from our office or from the New York State Higher Education Services Corporation, 99 Washington Avenue, Albany, New York 12255. Students from other states should investigate the availability of scholarship programs in their home state. The School assumes that all eligible students will apply for grants that are administered by their states of legal residence.

A limited number of **Armed Forces Health Professions Scholarships** are available. These scholarships provide full payment of direct educational costs (tuition, fees, books, etc.) and a stipend for living expenses. Each carries a service commitment. Students interested in applying for these programs are encouraged to contact a recruitment office in their area.

New scholarships may be available from the **National Health Service Corps Scholarship Program**. Priority has previously been given to recipients of the Exceptional Financial Need (EFN) scholarship.

The **New York State Regents Health Care Scholarships for Medicine and Dentistry** provide awards of up to \$10,000 per year. Applicants must be legal residents of New York State and be enrolled in a dental school or be candidates for admission to a dental school.

Applicants must agree to practice dentistry in an area of New York State designated as a shortage area. Applications and instructions may be obtained from:

State & Federal Scholarship & Fellowship Unit
Room 5C64
Cultural Education Center
State Education Department
Albany, New York 12230
(518) 474-6394

We strongly urge you to seek loans from family members and from other private sources, since more favorable interest rates and repayment schedules may be possible.

Creditworthiness

You should be aware that some lending agencies use creditworthiness as one of the criteria for determining eligibility for loans. Therefore, if you have a poor credit rating, it is imperative that you rectify past problems before matriculation. This is particularly true if you will be borrowing in excess of the basic \$18,500 available from the Federal Stafford Loan program, particularly if you wish to cover the "calculated" parental contribution or additional expenses. **The School cannot be responsible if you are denied access to loans because of bad consumer credit or problems with prior educational loans.**

In addition, certain "alternative" loans (loans that accrue interest while you are in school), may require creditworthy co-makers. They may apply two tests before approving a co-maker: (1) a good credit rating, and (2) an appropriate debt-to-income ratio that would lead a lender to assume that if called upon, your co-maker could afford to repay the loan. (Co-makers are only called upon for repayment if you do not repay.)

COLUMBIA UNIVERSITY (CU) LOANS

By filing the FAFSA (Free Application for Financial Student Assistance) and the GAPSFAS (Graduate and Professional School Financial Aid Service), you are automatically given consideration for all loans awarded directly by the School: Federal Perkins Loans, Health Professions Student Loans (HPSL), Loans for Disadvantaged Students (LDS), Alumni Appeal Loans, and other named CU loans.

The **Federal Perkins Loan** program provides long-term, low-interest (5%) loans to students demonstrating exceptional need as defined by the institution. The aggregate amount of Perkins funds a graduate student may receive from all undergraduate and graduate institutions is \$30,000; the annual maximum is \$5,000.

The **Health Professions Student Loan (HPSL)** program provides long-term, low-interest (5%) loans to students with exceptional financial need. Repayment of HPSL loans may be deferred until the borrower has completed "advanced professional training"—this includes residency, full-time postgraduate programs (e.g., periodontics, prosthodontics), and fellowship. Fellowship deferment is available for up to two years. Principal and interest are repayable over a ten-year period.

The **Loans for Disadvantaged Students (LDS)** program also provides long-term, low interest loans to students from disadvantaged backgrounds with financial need. The interest rate (5%) and other provisions are essentially the same as those for the Health Professions Student Loan program described above.

The **Alumni Appeal Loan** fund was established to offset the burden of "high-interest" loans to students who demonstrate financial need. As with the HPSTL, repayment of this loan may be deferred until borrower has completed advanced professional training. (Unlike the HPSTL, this deferment includes all fellowships, regardless of length). No interest is assessed during in-school and deferment periods. Following a six-month grace period and any subsequent deferments, principal and interest (4%) are repayable over a maximum of ten years.

Named Columbia University Loans are low-interest (4–9%, but most are 9%) loans available to students who demonstrate financial need. Repayment terms vary with each fund. Most require repayment to commence six or nine months after graduation with a maximum repayment period of ten years. In rare cases CU loans will require a co-maker. No interest is assessed during in-school and deferment periods.

EXTERNAL LOANS

Federal Stafford Student Loans (Subsidized and Unsubsidized)

The Federal Stafford Student Loan (formerly the Guaranteed Student Loan—GSL or the old Federally Insured Student Loan—FISL) program is designed to make low-interest loans available to students to help them meet their educational expenses. You may qualify for a Subsidized Federal Stafford Loan, which is based on financial need. If you qualify for a Subsidized Federal Stafford Loan, the federal government pays the interest on the loan to the lender (i.e. "subsidizes" it) while you are in school or in deferment.

NJCLASS—New Jersey College Loans to Assist State Students

This program for New Jersey residents only provides up to the cost of education each year with a basic fixed interest rate (currently 7.25%) and a 5% administrative fee. Interest begins to accrue immediately, increases after the fifth year of principal repayment, and is capitalized quarterly, a feature which can dramatically increase the total cost of your loan. For applications or questions call 1-800-35-NJLOAN or (609) 588-2222.

Health Education Assistance Loan (HEAL)

HEAL is a federally insured loan program available to students in the health professions. Currently all HEAL lenders use a promissory note with a variable interest rate. The interest rate for loans is reset quarterly, and is calculated by taking the interest rate on the 91-day treasury bill plus an additional 3%, with an 18% cap. Some lenders will charge less than the law allows. Interest on this loan begins to accrue immediately.

Alternative Deal Loans (A-DEAL)

This plan, offered by the KNIGHT College Resource Group, is available to creditworthy U.S. citizens and permanent residents; permanent residents are required to obtain a creditworthy cosigner who is a U.S. citizen or national. The loan carries a variable interest rate based on the 91-day treasury bill plus 2.50% prior to repayment, and plus 3.00% during repayment, with a cap of 18%. Interest begins to accrue immediately, is capitalized at graduation and again at repayment.

GradShare Education Loans

GradSHARE loans are designed for graduate and professional students and eligibility is based on future earning potential rather than on current income and creditworthiness. If a student is borrowing alone, he/she must be a U.S. citizen. If using a co-borrower, the co-borrower must be a U.S. or Canadian citizen and live in the United States.

Professional Education Plan (PEP) Loans

PEP loans are available from several lenders and are very similar to GradSHARE loans in most respects. The best interest rate is based on the prime rate plus 1.5–2%, depending on the lender. The rate varies quarterly, but your monthly principal and interest payments remain fixed for the life of the loan. Any fluctuation in the interest rate will be reflected in the length of repayment.

The Columbia Plan Loan Program

Columbia University has developed a program in conjunction with CoreStates Bank to provide a series of attractive alternatives for financing higher education. International students must have a creditworthy co-borrower who is a citizen or permanent resident of the United States. For further information call (212) 854-4206 from New York City or (800) 628-7567 from all other areas of the United States.

To be eligible for federal sources of financial aid, you must maintain satisfactory academic progress as outlined in this bulletin. The standards of achievement are the same as those required of non-financial aid recipients.

For detailed information on all financial aid programs, please contact the Office of Student Financial Planning at (212) 305-4100.

TAX WITHHOLDING FOR NONRESIDENT ALIEN SCHOLARSHIP AND FELLOWSHIP RECIPIENTS

United States tax law requires the University to withhold tax at the rate of 14 percent on scholarship and fellowship grants paid to nonresident aliens which exceed the cost of tuition, books, fees, and related classroom expenses.

Certain countries have entered into tax treaties with the United States which may serve to reduce this rate of withholding. However, even when such a treaty applies, the student and the University must report the full amount of such excess to the Internal Revenue Service. If a student claims tax treaty benefits, he or she must also report this amount to his or her country of residence.

The International Students and Scholars Office (524 Riverside Drive; telephone 212-854-3587) has prepared a packet of tax information which is available to students and is revised annually. The tax law is complex and may vary with regard to individual circumstances. Therefore, as the University is not in a position to offer individual tax advice, each student may also wish to consult the consulate of their country of residence or a qualified tax professional.

HONORS

D.D.S. Program

Alpha Omega Scholarship Award. A plaque presented to the graduating student (not necessarily an Alpha Omega) with the highest scholastic average for the four years of dental studies. First awarded in 1949.

American College of Dentists, New York Section. An award of \$100 and a plaque or scroll. Presented to a third-year student who is a good all-around student, a member of the student section of the American Dental Association, and who exhibits leadership.

Herbert J. Bartelstone Award in Pharmacology. An award given annually to a member of the graduating class of the College of Physicians and Surgeons and a member of the graduating class of the School of Dental and Oral Surgery who have demonstrated exceptional accomplishments in pharmacology.

William Bailey Dunning Award for Excellence in Periodontology. A medal awarded to the graduating student who is the most proficient in periodontology. First awarded in 1957.

Ella Marie Ewell. A medal awarded to the graduating student who, in the best judgment of the faculty, has exhibited meritorious service to students, faculty members, and the University.

Arthur Merritt Award. A certificate and award of \$50 to the outstanding fourth-year student in periodontics.

Prize for Excellence in Operative Dentistry. A certificate awarded by the staff of the Division of Operative Dentistry to the graduating student who has shown the greatest proficiency in operative dentistry.

Certificate for Excellence in Pediatric Dentistry. A plaque awarded to a graduating student for excellence in pediatric dentistry. Established by the Class of 1929.

Psi Omega Fraternity Award. A plaque presented by the Gamma Lambda Chapter to the graduating student who has displayed exemplary professional conduct.

Rowe-Wiberg Medal. An award made by the Association of Dental Alumni to the graduating student who has shown the greatest proficiency in prosthetic dentistry.

Van Woert Award. A scholarship given to the senior dental student, at the beginning of the year, who has high scholastic attainment and personal character as well as need for financial assistance.

Omicron Kappa Upsilon. Epsilon Epsilon chapter of Omicron Kappa Upsilon, national honorary fraternity, was chartered in the School of Dental and Oral Surgery in 1934. The purpose of the fraternity is to recognize and honor a maximum of 12 percent of the members of the graduating D.D.S. class on the basis of scholarship, character, and potential for further professional growth and attainments.

LIVING ARRANGEMENTS

Health Sciences Campus

The University seeks to provide housing for all students who are regularly registered for an approved program of full-time study. In recent years, however, a housing shortage has developed in New York, and on occasion the demand has exceeded the number of spaces available. The School of Dental and Oral Surgery, in cooperation with the other divisions of the Health Sciences campus, shares in the available dormitory space. The Central Housing Office of the Health Sciences campus in Bard Hall (50 Haven Avenue) acts as a clearing house for students who are seeking housing on or near the campus. Each year in May this office automatically mails information and an application for housing to each newly enrolled student. Completed applications are forwarded to the chairman of the School Housing Committee for ranking. Priority for placement is given to entering students, with out-of-state students receiving priority over instate students. In addition to assisting students in securing dormitory space or University-owned apartment housing, the Central Housing Office maintains a current list of private apartments available in the surrounding neighborhood. Applications and information concerning room availability will be furnished upon request by the Director of the Central Housing Office, Bard Hall, 50 Haven Avenue, New York, N.Y. 10032, telephone (212) 305-6853.



STUDENT ORGANIZATIONS AND ACTIVITIES

Student Council

In accordance with the plan for all schools in the University, the students are organized under a Student Government Association. Through this organization the students have representation on the Columbia University Student Council, and are eligible for participation in the many activities at the Medical Center and on the Morningside campus.

The William Jarvie Society

The William Jarvie Society for Dental Research is a dental honor society, membership in which is based on scholarship and interest in dental research, and for which second-, third-, and fourth-year D.D.S. students are eligible. The society was organized in the School of Dental and Oral Surgery in 1920 and named after Dr. William Jarvie because of his wide interest in the promotion of dental research. The society aims to promote the spirit of research among the students.

The Student Dental Association

The Student Dental Association of Columbia University was established in 1960 to provide a professional and social forum in which D.D.S. candidates participate. The general program of this organization is patterned after the program of local dental societies, in which the graduate dentist contributes to the organized dental profession.

International Students

The staff of the International Students and Scholars Office on the Morningside campus provides advice and counseling to international students on such matters as housing, personal and financial problems, and regulations of the United States Immigration and Naturalization Service (visas, extensions to stay, work permission, temporary departure from the United States, transfer from Columbia to another school, termination of study). Information about the various international clubs at Columbia and about opportunities to attend conferences, travel in the United States, and participate in community and cultural activities can be obtained from this office. Maps of New York City and discount tickets to concerts and plays are available.

The staff of the International Students and Scholars Office provides information and counseling on University admission, advanced standing, English proficiency examinations, and academic placement.

Postdoctoral Programs

Student organizations in the postdoctoral disciplines are open to membership. The Program Director should be contacted for additional information.

LICENSE TO PRACTICE

Dentistry

Successful performances in Parts I and II of the examinations given by the Council of the National Board of Dental Examiners are preliminary requirements for licensure in most states of the United States, including New York.

Those seeking licensure solely in New York State may take the final or clinical examinations offered by the Board of Dental Examiners of the State of New York. Successful completion of these examinations entitles the applicant to licensure, assuming the prerequisites of good moral character, citizenship, or declaration of intention of becoming a citizen are fulfilled. For additional information, request a copy of Handbook 10, *Professional Education*, from the Division of Professional Licensing Services, New York State Department of Education, Albany, N.Y. 12201.

It is advisable, however, that candidates for licensure take the clinical examinations offered by the North East Regional Board of Dental Examiners, the content and format of which are similar to those of New York State. Successful completion of these examinations, together with fulfillment of such minor prerequisites as may be required by individual states, permits licensure in the states of Connecticut, Illinois, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia, and the District of Columbia, as well as New York State.

Additional information, including applications, format of examinations, and examination schedules are available from the North East Regional Board of Dental Examiners, 4645 Deane Avenue N.E., Washington, D.C. 20019.



Officers of Instruction

DENTAL AND ORAL SURGERY

Chair

Professor Allan J. Formicola

ASSOCIATE DEAN'S SECTION

Stephen B. Doty

Adjunct Professor of Bone Biology

B.A., Rice, 1961; M.A., 1963; Ph.D., 1965

Norman Kahn

Edwin S. Robinson Professor of Dentistry, Professor of Pharmacology

B.A., Columbia, 1954; D.D.S., 1958; Ph.D., 1964

Marlene Moss-Klyvert

Associate Professor of Clinical Dentistry

A.A.S., New York Community College, 1952; B.S., Columbia, 1971; M.S., 1972; M.Ed., 1977; Ed.D., 1980

Letty Moss-Salentijn

Professor of Dentistry in Anatomy

D.D.S., Utrecht, 1967; Ph.D., 1976

Johanna Odrich

Associate Professor of Clinical Dentistry

B.S., Columbia, 1957; M.S., 1975; M.P.H., 1980

Aaron S. Posner

Adjunct Professor of Dentistry

B.S., Rutgers, 1941; M.S., Polytechnical Institute of Brooklyn, 1949; Ph.D., Liege (Belgium), 1954

COMMUNITY HEALTH

Director

Professor Donald Sadowsky

Julius R. Berger

Adjunct Associate Professor of Dentistry

B.S., City College (New York), 1961; D.D.S., State University of New York (Buffalo), 1965

Ronald P. Burakoff

Adjunct Associate Professor of Dentistry

B.Sc., McGill, 1969; D.M.D., Tufts, 1973; M.P.H., North Carolina (Chapel Hill), 1974

Neal A. Demby

Adjunct Associate Professor of Dentistry

B.A., Rutgers, 1964; D.M.D., Pennsylvania, 1968

Alex M. Grant

Assistant Clinical Professor of Dentistry

D.D.S., Columbia, 1977; M.P.H., 1984

Edwin C. Horne

Adjunct Assistant Professor of Dentistry

D.D.S., 1952

Hilton O. Hosannah

Assistant Clinical Professor of Dentistry

B.S., Howard, 1952; D.D.S., 1958; M.P.H., Columbia, 1970

Saul Kamen

Associate Clinical Professor of Dentistry

B.A., New York University, 1937; D.D.S., Pennsylvania, 1940

Carol Kunzel

Assistant Professor of Dental Community Health

B.A., Kansas, 1969; M.A., New York University, 1973; Ph.D., 1979

Earl Marsan

Assistant Clinical Professor of Dentistry

B.S., Marquette, 1951; D.D.S. 1955

Stephen E. Marshall

Assistant Professor of Dentistry (in Public Health)

B.A., Case Western Reserve, 1982; D.D.S., State University of New York (Buffalo), 1986; M.P.H., Columbia, 1989

James E. McIntosh

Associate Professor of Clinical Dentistry

B.A. Missouri, 1965; D.D.S., Meharry, 1969; M.P.H., Columbia, 1975

Frank B. Parise

Adjunct Assistant Professor of Dentistry

D.D.S., 1953

Karen Raphael

Assistant Professor of Dental Community

Health and Public Health

B.A., Hofstra, 1977; M.A., 1982; Ph.D., 1984; M.S., Columbia, 1988.

Donald Sadowsky

Professor of Dentistry

D.D.S., New York University, 1954; M.P.H., Columbia, 1971; Ph.D., 1977

W. Ramon Smithea

Adjunct Associate Professor of Dentistry

D.D.S., Howard, 1959

Albert J. Thompson

Assistant Clinical Professor of Dentistry

B.A., Columbia, 1954; D.D.S., 1960

Bernard B. Tolpin

Assistant Clinical Professor of Dentistry

B.A., Michigan, 1956; D.D.S., Columbia, 1960

Burton S. Wasserman

Clinical Professor of Dentistry

B.A., New York University, 1953; D.D.S., 1957

ENDODONTICS

Director

Professor Gunnar Hasselgren

Robert L. Ambinder

Associate Clinical Professor of Dentistry

B.S., College of the City of New York, 1955; D.D.S., New York University, 1961

Howard Aaronson

Assistant Clinical Professor of Dentistry

B.S., New York University, 1975; D.D.S., 1979

Gerald H. Besen

Associate Clinical Professor of Dentistry
D.D.S., Minnesota, 1947

Dory Calev

Assistant Professor of Clinical Dentistry
B.A., New York University, 1971; D.D.S., Columbia, 1976

Winston Wen-Jong Chen

Assistant Clinical Professor
Ph.D., Minnesota, 1974; D.D.S., 1975

Mal Bong Choi

Instructor
B.S., D.D.S., Seoul National University, 1978; D.D.S., M.P.H., Columbia, 1993.

Fredric E. Goodman

Associate Clinical Professor
D.M.D., Temple, 1962

Albert Granger

Assistant Clinical Professor of Dentistry
B.S. Elizabethtown, 1982; D.D.S., Howard, 1987

Gunnar Hasselgren

Professor of Clinical Dentistry
D.D.S., Karolinska Institute (Sweden), 1963; Ph.D., Lund (Sweden), 1977; D.D.S., Columbia, 1989

Robert Indyk

Assistant Clinical Professor of Dentistry
B.A., Brooklyn, 1969; D.M.D., Pennsylvania, 1974

Mitchell Kellert

Assistant Clinical Professor of Dentistry
B.S., Maryland, 1972; D.D.S., 1976

Jack Levi

Associate Clinical Professor of Dentistry
B.S., College of the City of New York, 1960; D.D.S., New York University, 1966

Kenneth J. Markowitz

Assistant Clinical Professor of Dentistry
B.S., State University of New York (Stony Brook), 1977; D.D.S., Columbia, 1985

Nelson Mendell

Assistant Clinical Professor of Dentistry
A.B., Pennsylvania, 1961; D.M.D., Tufts, 1965

Joshua M. Most

Assistant Clinical Professor of Dentistry
B.A., Colgate, 1974; M.S., C. W. Post, 1976; D.D.S., Columbia, 1980

Peter Notaro

Assistant Clinical Professor of Dentistry
B.A., Columbia, 1952; D.D.S., 1956

Maya Prabhu

Instructor
B.D.S. Government Dental College of Bangalore (India), 1983; D.D.S., Columbia, 1991.

Jeffrey S. Senzer

Assistant Clinical Professor of Dentistry
B.A., Hunter, 1964; M.A., Brooklyn, 1967; D.D.S., Columbia, 1973

Charles S. Solomon

Clinical Professor of Dentistry
B.A., Columbia, 1955; D.D.S., 1958

OPERATIVE DENTISTRY*Director*

Professor Richard M. Lichtenthal

Alvin T. Boyd

Assistant Clinical Professor of Dentistry
B.A., Lafayette, 1967; D.M.D., Pennsylvania, 1971

Victor L. Bruzzi

Assistant Professor of Clinical Dentistry
B.A., Brooklyn, 1982; D.D.S., Columbia, 1986

Gregory N. Bunza

Assistant Professor of Clinical Dentistry
B.S., Polytechnical Institute of Brooklyn, 1972; D.D.S., New York University, 1989

Anthony J. Curinga

Associate Clinical Professor of Dentistry
B.S., St. Francis, 1962; D.D.S., Columbia, 1966

Kenneth C. Deesen

Associate Clinical Professor of Dentistry
D.D.S., Columbia, 1948

Paul Duboff

Associate Clinical Professor of Dentistry
B.S., Rutgers, 1952; D.D.S., Columbia, 1956

Daniel D. Epstein

Associate Clinical Professor of Dentistry
B.A., Columbia, 1953; D.D.S., 1956

Vicky Evangelidis-Sakellson

Assistant Professor of Clinical Dentistry
B.A., Clark, 1977; D.D.S., Columbia 1987

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B.A., Vermont, 1963; D.D.S., Columbia, 1968

Walter A. Gutstein

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Renee W. Joskow

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B.A., State University of New York (Binghamton), 1981; D.D.S., Columbia, 1985; M.P.H., 1985

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B.S., D.D.S.

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Richard M. Lichtenthal

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B.S., Muhlenberg, 1958; D.D.S., Columbia, 1962

Richard H. Low

Assistant Clinical Professor of Dentistry
B.A., New York University, 1973; D.D.S., Columbia, 1977

Andrei M. Marcu

Assistant Clinical Professor of Dentistry
M.D., Medico Pharmacy Institute (Romania), 1960;
D.D.S., New York Dental Board, 1973

Leonard J. Mark

Adjunct Assistant Professor
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B.S., State University of New York (Stony Brook), 1976;
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Vincent Petrazzuolo

Assistant Clinical Professor of Dentistry
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James P. Philbin III

Assistant Clinical Professor of Dentistry
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Joseph Pianpiano, Jr.

Associate Clinical Professor of Dentistry
D.D.S., Columbia, 1962

Samuel P. Pritz

Associate in Clinical Dentistry
D.D.S., Columbia, 1933

Chester R. Redhead

Assistant Clinical Professor of Dentistry
B.A., Howard, 1950; D.D.S., 1954

George Rudensky

Associate Clinical Professor of Dentistry
D.D.S., Columbia, 1958

Roger P. Santise

Assistant Clinical Professor of Dentistry
B.S., Manhattan, 1966; D.D.S., Columbia, 1981

Robert Tauber

Assistant Clinical Professor of Dentistry
B.A.; D.D.S., Columbia, 1962

Peter J. Zegarelli

Assistant Clinical Professor
B.A., Columbia, 1974; D.D.S., 1978

Laureen A. Zubiaurre

Assistant Professor of Clinical Dentistry
B.S., Fairleigh Dickinson, 1981; D.M.D., 1986

ORAL AND MAXILLOFACIAL SURGERY*Director*

Professor Steven M. Roser

Melvin J. Adler

Assistant Clinical Professor
B.A., Yeshiva, 1957; D.D.S., New York University, 1961

David A. Albert

Assistant Professor of Dentistry (and Public Health)
B.A., New York University, 1980; D.D.S., 1984; M.P.H.,
Columbia, 1987

Jon Albert Bartlett

Assistant Clinical Professor
B.A., Johns Hopkins, 1976; D.D.S., Medical College of
Virginia, 1980

Mitchell L. Beck

Assistant
B.S., Hofstra, 1974; D.D.S., Columbia, 1981

Andrew Blitzer

*Professor of Clinical Dentistry and Professor of Clinical
Otolaryngology*
B.A., Adelphi, 1966; D.D.S., Columbia, 1970; M.D., Mt.
Sinai (New York), 1973

Andrew S. Breiman

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B.A., State University of New York (Buffalo), 1971;
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Willie L. Bryant

Instructor
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Daniel Buchbinder

Associate Clinical Professor
B.Sc., McGill, 1979; D.M.D., Montreal, 1981

Jeffrey R. Burkes

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B.S., City College (New York), 1970, D.D.S., New York
University, 1975

David Caponigro

Instructor in Clinical
B.S., Fordham, 1980; D.D.S., Columbia, 1984

Bernard M. Cohen

Adjunct Associate Professor
B.A., New York University, 1942; D.M.D., Pittsburgh,
1944

Donald F. Cohen

Assistant Clinical Professor of Dentistry
B.A., Hunter, 1966; D.M.D., Pennsylvania, 1970

Susan J. Crawford-Lemelle

Assistant Professor of Clinical Dentistry
B.S., Tufts, 1979; D.D.S., New York University, 1983

Kourken A. Daglian

Associate Clinical Professor of Dentistry
B.S., College of the City of New York, 1941; D.D.S.,
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Dino M. DeFilippis*Instructor*

B.A., New York University, 1982; D.D.S., Columbia, 1986

Anthony L. DiMango*Associate Clinical Professor*

B.S., Fordham, 1948; D.D.S., Georgetown, 1953

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B.A., Yeshiva, 1974; D.D.S., Columbia, 1978

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B.S., Miami, 1978; D.M.D., Fairleigh Dickinson, 1987

Neal Ezra*Assistant Clinical Professor*

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Associate Clinical Professor of Dentistry
D.D.S., Columbia, 1946

Harvey A. Quinton

Instructor
D.D.S., Howard, 1978

Anthony P. Randi

Assistant Clinical Professor of Dentistry
B.S., State University of New York (Oneonta), 1978;
D.D.S., Columbia, 1982

Edward R. Raskin

Adjunct Assistant Professor (Booth Memorial)
D.D.S.

Lester E. Rosenthal

Clinical Professor of Dentistry
A.B., Hofstra, 1948; D.D.S., Columbia, 1953

Louis I. Rubins

Clinical Professor of Dentistry
B.S., Queens (New York), 1956; D.D.S., Columbia, 1960

Gerald F. Sabol

Associate Clinical Professor of Dentistry
B.S., Fairfield, 1965; D.D.S., Maryland, 1970

John M. Scarola

Clinical Professor of Dentistry
B.S., Fordham, 1956; D.D.S., Columbia, 1960

James W. Schweiger

Professor of Clinical Dentistry
D.D.S., Iowa, 1954; M.S., 1957

Theodore Sewitch

Assistant Clinical Professor of Dentistry
B.S., Rhode Island, 1978; D.M.D., Fairleigh Dickinson, 1982

Bernard D. Sherman

Adjunct Assistant Professor of Dentistry
D.D.S., 1947

David R. Silken

Adjunct Assistant Professor of Dentistry
B.A., New York University, 1968; D.D.S., 1972

Dennis P. Tarnow

Adjunct Assistant Professor of Dentistry
B.A., Brooklyn, 1968; D.D.S., New York University, 1972

Mitchell Teitelbaum

Instructor
B.A. Queens (New York), 1982; D.D.S., Columbia, 1986

Ivan E. Terrero

Instructor in Clinical Dentistry
D.D.S., New York University, 1989

Randall W. Toothaker

Associate Professor of Clinical Dentistry
B.S., Oklahoma Baptist, 1980; D.D.S., Oklahoma, 1981

Thomas C. Tong

Assistant Clinical Professor of Dentistry
B.A., Oberlin, 1961; M.S., Creighton, 1963; D.D.S., Columbia, 1968

Dante M. Torrese

Assistant Clinical Professor of Dentistry
B.S., Manhattan, 1971; D.D.S., Columbia, 1975

Fred P. Tripodi

Instructor
B.S., Iona, 1978; D.D.S., 1982

Ennio L. Uccellani*Professor of Dentistry*

B.S., College of the City of New York, 1946; D.D.S., Columbia, 1948

James L. Verna*Lecturer*

B.A., Cornell, 1960; D.D.S., New York University, 1962

Stanley M. Weinstock*Lecturer*

B.S., Brooklyn, 1958; D.D.S., New York University, 1962

George Shelby White*Assistant Clinical Professor of Dentistry*

B.A., Hompton Institute, 1972; D.D.S., New York University, 1975

Robert F. White, Jr.*Associate Professor of Clinical Dentistry*

B.S., Memphis State, 1977; D.D.S., Tennessee, 1982

Jerome A. Zane*Associate Clinical Professor of Dentistry*

D.D.S., Columbia, 1943

**EXTRAMURAL CLINICAL
CLERKSHIP PROGRAM****BETH ISRAEL HOSPITAL**

Dr. Charles Barr

*Director, Department of Dentistry***COLUMBIA-PRESBYTERIAN MEDICAL CENTER**

Dr. Steven Roser

*Director, Department of Dentistry***BRONX, V.A. HOSPITAL**

Dr. Gerald Sabol

*Director, Department of Dentistry***HARLEM HOSPITAL**

Dr. James McIntosh

*Director, Department of Dentistry***ST. LUKE'S/ROOSEVELT HOSPITAL**

Dr. Jerome Friedman

*Director, Department of Dentistry***MOUNT SINAI HOSPITAL**

Dr. Jack Klatell

*Director, Department of Dentistry***MONTEFIORE MEDICAL CENTER**

Dr. Norman Tieger

*Director, Department of Dentistry***HELEN HAYES HOSPITAL**

Dr. Marc Michalowicz

*Director, Department of Dentistry***KINGS COUNTY HOSPITAL**

Dr. Jules Berger

*Director, Department of Dentistry***WESTCHESTER COUNTY HOSPITAL**

Dr. Norman Petti

*Director, Department of Dentistry***WOODHULL MEDICAL CENTER**

Dr. Peter Sherman

*Director, Department of Dentistry***ST. JOSEPH'S HOSPITAL**

Dr. Hillel Ephnos

*Director, Department of Dentistry***NEW YORK HOSPITAL-QUEENS CENTER (BOOTH)**

Dr. Burt Wasserman

*Director, Department of Dentistry***BRONX-LEBANON HOSPITAL**

Dr. Paul Gates

*Director, Department of Dentistry***HACKENSACK HOSPITAL**

Dr. Kevin Heaney

*Director, Department of Dentistry***LUTHERAN**

Dr. Neal Demby

*Director, Department of Dentistry***MAIMONIDES**

Dr. Alvin Fried

*Director, Department of Dentistry***MORRISTOWN HOSPITAL**

Dr. Harriet Goldman

*Director, Department of Dentistry***ST. BARNABAS HOSPITAL**

Dr. Dana Rosenberg

*Director, Department of Dentistry***PENINSULA HOSPITAL**

Dr. Bernard Cohen

*Director, Department of Dentistry***F.D.R. V.A. HOSPITAL**

Dr. Paul Rogie

*Director, Department of Dentistry***CASTLE POINT V.A. HOSPITAL**

Dr. Paul Carrell

Director, Department of Dentistry

DENTAL AND ORAL SURGERY: OTHER OFFICERS OF INSTRUCTION

Instructors

Howard N. Aaronson, B.A., D.D.S.
 Figen A. Baydur, D.M.D.
 Steven Bogart, B.A., D.D.S.
 Laurie Bovino, D.M.D.
 Stanley Brotzman, B.S., D.D.S.
 Willie L. Bryant, B.S., D.D.S.
 Henry Chang, Jr., B.A., D.D.S.
 Michael Chang, D.D.S.
 David Cheng, B.A., D.D.S.
 Joseph G. Comizio, B.S., D.D.S.
 Ralph Costagliola, B.A., D.D.S.
 Jacqueline Crane, B.S., D.D.S.
 Gina Delia, B.A., D.M.D.
 Dino M. DeFilippis, B.A., D.D.S.
 Leslie R. Elfenbein, B.A., D.M.D.
 Philip L. Epstein, D.D.S.
 Bendj Feredjian, B.A., D.D.S.
 Armando Fernandez, D.D.S.
 Gerald E. Finke, B.S., D.D.S.
 Adam Freeman, D.D.S.
 Luciano Ghisalberti, B.S., D.M.D.
 Dean Eliot Glasser, D.D.S.
 Charles F. Grannum, B.A., D.M.D.
 Larry R. Green, D.D.S.
 Bruce L. Greenberg, A.B., D.D.S.
 Meralce G. Guhl, B.S.
 Robert P. Indyk, B.A., D.M.D.
 Alfred C. Joseph, D.D.S.
 Martin Alan Kaminker, B.A., D.M.D.
 Gary Kaye, D.D.S.
 Myung Jean Ke, B.A., D.D.S.
 Bernard Keller, B.S., D.D.S.
 Syngbum Kim, B.S., M.S., D.D.S.
 Robert S. Klotz, B.A., D.D.S.
 Steven F. Kornhaber, B.A., M.S., D.D.S.
 Elizabeth Linder, B.A., D.D.S.
 Thelma B. Llorente, D.M.D.
 Anthony Lopresti, D.D.S.
 Michael J. Manole, B.S., D.D.S.
 Lorraine Mashioff, R.D.H.
 Roderick Mathis, B.S., D.D.S.
 Kenneth Maykow, B.S., D.D.S.
 Nelson Mendel, A.B., D.M.D.
 James Morris, D.D.S.
 Constance Newton, D.D.S.
 John E. Purpura, B.S., D.D.S.
 Harvey A. Quinton, D.D.S.
 Michael Schwartz, D.M.D.
 Jeffrey I. Stein, B.A., D.D.S.
 Morton Tau, D.M.D.
 Mitchell Teitelbaum, B.A., D.D.S.
 Fred P. Tripodi, B.S., D.D.S.
 Alexander Tsui, B.A., D.M.D.
 Barry R. Wolinsky, A.B., M.S., D.D.S.
 Janice Yee, D.M.D.
 Georgina Pragay Zabos, D.D.S.
 David E. Zipkowitz, D.M.D.

Instructors in Clinical Dentistry

Benjamin Baniqued, D.D.S.
 Dennis Barry, D.M.D.
 Maria T. Benedicto, D.D.S.
 Bruce W. Bitzer, D.M.D.
 Michael L. Bolden, D.D.S.
 Michael B. Bruno, D.D.S.
 Ronni S. Bucklan, B.A., D.D.S.
 David Caponigro, B.S., D.D.S.
 Shiuann-Rana Chen, D.D.S.
 Bo Young Chun, D.D.S.
 Herbert Danziger, D.D.S.
 Peter Demarest, A.B., D.M.D.
 Howard Deutsch, D.D.S.
 Susan DiMarco, D.D.S.
 Adam Freeman, D.D.S.
 Paul Gulatsis, D.M.D.
 Harvey Goldwasser, B.A., D.D.S.
 Charles Grannum, B.A., D.M.D.
 Angela Graves, D.D.S.
 Alissa Gursky, B.S., D.D.S.
 Junsung Ha, B.A., D.D.S.
 Maryam Hashemi, D.D.S.
 Sandra C. Hoffmeir, D.D.S.
 Denise How, D.M.D., D.D.S.
 Olga Hussakowsky, D.D.S.
 Jenny Kanganis, B.A., D.D.S.
 Jeffrey Kim, B.A., D.D.S.
 Sung-Rae Kim, D.D.S.
 Eva Kleinmunz, B.A., D.D.S.
 Kei Lam, B.A., D.M.D., M.P.H.
 John Lanzetta, B.S., D.M.D.
 Gabriella Lee, D.D.S.
 Insup Lee, B.A., D.D.S.
 Kenneth Lee, D.D.S.
 Roberto Lugo, D.M.D.
 Kelly A. McNally, D.D.S.
 Leon S. Merrick, B.S., D.D.S.
 Patricia Miller, B.S., D.D.S.
 Dennis Mitchell-Lewis, B.A., D.D.S.
 Guillermo Molino, B.S., D.D.S.
 Peter Notaro, D.D.S., A.B.
 James R. Olivari, B.S., D.M.D.
 Victor Pardi, D.D.S.
 Joseph A. Parisi, B.S., D.D.S.
 Lawrence Passarelli, B.S., D.D.S.
 Maya Prabhu, B.D.S., D.D.S.
 Sherif Radwan, B.D.S., D.D.S.
 Judith A. Rapiejko, D.D.S.
 Alan Rothstein, B.A., D.D.S.
 Leo Seto, B.S., D.D.S.
 Rosalie Silvestri, B.S., D.D.S.
 Janet Stoupe-Lerman, B.Sc., M.Sc., D.M.D.
 Ivan Terrero, D.D.S.
 Donald Tyler, D.D.S.
 Javier Urquiola, D.D.S.
 Lillian A. Vidal, D.D.S.
 Jean Weng, D.D.S.
 Andrew E. Zeidman, B.S., D.D.S.

Lecturers

Alan Schwimmer, D.D.S.,
 James L. Verna, B.A., D.D.S.
 Stanley M. Weinstock, B.S., D.D.S.

Special Lecturers
 Robert E. Crowley, B.A., D.D.S.
 Gustav T. Durrer, D.M.D., D.D.S.
 George W. Hindels, M.D., D.D.S.
 David Kaplan, B.S., D.D.S.
 Charles Noback, B.S., Ph.D.
 Steven S. Scrivani, D.D.S.
 Arthur Shain, B.S., D.D.S., M.P.H.
 Boaz Shattan, B.A., D.D.S.
 Spyros M. Vratsanos, B.S., M.S., Ph.D.

Special Lecturers/Professors Emeriti

Stanislaw H. Brzustowicz, B.S., D.D.S.
 Edward A. Cain, Jr., B.S., D.D.S.
 Nicholas A. DiSalvo, D.D.S., Ph.D.
 Solon A. Ellison, D.D.S., Ph.D.
 Robert Gottsegen, B.A., D.D.S.
 Sidney L. Horowitz, B.S., D.D.S.
 Austin H. Kutcher, D.D.S.
 Joseph M. Leavitt, B.S., D.D.S.
 John J. Lucca, A.B., D.D.S.
 Irwin D. Mandel, B.S., D.D.S.
 George Minervini, D.D.S.
 Melvin L. Moss, D.D.S., Ph.D.
 Henry I. Nahoum, A.B., D.D.S.
 Solomon N. Rosenstein, B.A., D.D.S.
 Ennio Uccellani, B.S., D.D.S.
 Edward V. Zegarelli, B.A., M.S., D.D.S.

Staff Associate

Romanita Celenti, M.S.

Associates in Clinical Dentistry

A. William Burger, B.S.
 Louise A. Gayle, M.A., C.D.T.
 Samuel P. Pritz, D.D.S.
 Thomas Sedgwick, B.S., M.S.
 George Thoupos, A.A.

Assistant in Clinical Dentistry

Mitchell L. Beck, B.S., D.D.S.

THE PRESBYTERIAN HOSPITAL DENTAL SERVICE

Director

Steven M. Roser

Consultants Emeriti

Nicholas DiSalvo
 Solon Ellison
 Sidney Horowitz
 Irwin Mandel
 Melvin Moss
 Henry Nahoum
 Solomon Rosenstein
 Ennio Uccellani

Attending Dental Surgeons

Jacob Abelson
 Herold Baurmash
 Stanislaw Brzustowicz
 Edward Cain
 Allan Formicola
 Robert Gottsegen
 Alvin Grayson
 Sidney Horowitz
 Norman Kahn
 George Kiriakopoulos
 Austin Kutscher
 Eugene LaSota
 John Lind
 John Lucca
 Louis Mandel
 Michael Marder
 Louis Rubins
 Murray Schwartz
 Neill Serman
 Julius Tarshis
 Kenneth Troutman

Associate Attending Dental Surgeons

Thomas Cangialosi
 Kourken Daglian
 Martin Davis
 Stella Efstratiadis
 Heidi Hills
 Howard Israel
 Paul Kamen
 Frances Karlan
 Ira Lamster
 Richard Lichtenthal
 Guy Metcalf
 Dennis Morea
 Joan Phelan
 John Piro
 Bernard Riklin
 Steven Roser

John Scarola
 Daniel Schube
 Boaz Shattan
 Morton Stern
 Paul Tannenbaum
 Victor Terranova
 Nicholas Vero
 Robert Wright
 Jerome Zane
 David Zegarelli

Assistant Attending Dental Surgeons

Melvin Adler
 David Albert
 Jed Best
 Victor Bruzzi
 Gregory Bunza
 Dory Calev
 Earl Clarkson
 Donald Cohen
 Susan Crawford-LeMelle
 Vicky Evangelidis-Sakellson
 Armando Fernandez
 James Fine
 Madeline Ginzburg
 Norman Gold
 Michael Goldberg
 Steven Goldberg
 Alex Greenberg
 Ann-Marie Guerra-Paoli
 Joseph Harnett
 Ian Hu
 Lois Jackson
 Margot Jaffe
 Renee Joskow
 John Kallis
 Martin Kaminker
 Susan Karabin
 Irving Kittay
 Shari Klein

Arthur Krinsky
 Laureen Langer
 Michael Marouni
 Stephen Marshall
 John McCabe
 Joseph McManus
 Marc Michalowicz
 David Momtahan
 Ronnie Myers
 Salvatore Napoli
 Olivier Nicholay
 Constance Phillips
 David Pitman
 Herbert Rabinowitz
 Paul Rogow
 Gary Stern
 James Su
 Synan William
 Steven Syrop
 Mark Tepper
 Wayne Turk
 Robert Veligdan
 Peter Wang
 Bertram Weissman
 Daniel Zedeker
 Laureen Zubiaurre

Assistant Dentists

Mitchell Beck
 David Caponigro
 Dino Defilippis
 Luciano Ghisalberti
 Dean Glasser
 Robert Klotz
 Jeffrey Stein
 Barry Wolinsky
 Andrew Zeidman

Health Sciences Department Chairs

ANATOMY AND CELL BIOLOGY

Chair

Professor Michael D. Gershon

ANESTHESIOLOGY

Acting Chair

Professor Mieczyslaw Finster

BIOCHEMISTRY AND MOLECULAR BIOPHYSICS

Chair

Professor David Hirsh

DENTAL AND ORAL SURGERY

Chair

Professor Allan J. Formicola

MEDICINE

Chair

Professor Myron L. Weisfeldt

MICROBIOLOGY

Acting Chair

Professor Saul J. Silverstein

OTOLARYNGOLOGY

Chair

Professor Lanny G. Close

PATHOLOGY

Chair

Professor Michael L. Shelanski

PEDIATRICS

Chair

Professor John M. Driscoll

PHARMACOLOGY

Chair

Professor Brian F. Hoffman

PHYSIOLOGY

Chair

Professor Samuel C. Silverstein

PSYCHIATRY

Chair

Professor Herbert Pardes

PUBLIC HEALTH

Dean

Professor Allan Rosenfield

SURGERY

Chair

Professor Keith Reemtsma

Official Regulations

RESERVATION OF UNIVERSITY RIGHTS

This bulletin is intended for the guidance of persons applying for or considering application for admission to Columbia University and for the guidance of Columbia students and faculty. The bulletin sets forth in general the manner in which the University intends to proceed with respect to the matters set forth herein, but the University reserves the right to depart without notice from the terms of this bulletin. The bulletin is not intended to be and should not be regarded as a contract between the University and any student or other person.

UNIVERSITY REGULATIONS

According to University regulations, each person whose registration has been completed will be considered a student of the University during the term for which he or she is registered unless the student's connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any school or college, either of Columbia University or of any other institution, without the specific authorization of the dean or director of the school or college of the University in which he or she is first registered.

The privileges of the University are not available to any student until he or she has completed registration. A student who is not officially registered for a University course may not attend the course unless granted auditing privileges. No student may register after the stated period unless he or she obtains the written consent of the appropriate dean or director.

The University reserves the right to withhold the privilege of registration or any other University privilege from any person with unpaid indebtedness to the University.

Attendance and Length of Residence

The minimum residence requirement for each Columbia degree is the equivalent of two terms of full-time course work (or 30 points) completed at Columbia University. A student who wishes to earn both a master's degree and a doctorate from Columbia should be aware that any advanced standing awarded for graduate work completed elsewhere will not reduce the minimum residence required for obtaining both degrees.

Students are held accountable for absences incurred because of late enrollment.

A student in good standing who must interrupt his or her studies may be granted a leave of absence for a stated period, usually not to exceed one year. Students must apply in writing to the dean, stating the reason for and the period of the leave.

Religious Holidays

It is the policy of the University to respect its members' religious beliefs. In compliance with New York State law, each student who is absent from school because of his or her religious beliefs will be given an equivalent opportunity to register for classes or make up any examination, study or work requirements that he or she may have missed because of such absence on any particular day or days. No student will be penalized for absence due to religious beliefs, and alternative means will be sought for satisfying academic requirements involved.

Officers of administration and of instruction responsible for scheduling of academic activities or essential services are expected to avoid conflict with religious holidays as much as possible. If a suitable arrangement cannot be worked out between the student and instructor, they should consult the appropriate dean or director. If an additional appeal is needed, it may be taken to the provost.

ACADEMIC DISCIPLINE

The continuance of each student upon the rolls of the University, the receipt of academic credits, graduation, and the conferring of any degree or the granting of any certificates are strictly subject to the disciplinary powers of the School and University.

RULES OF UNIVERSITY CONDUCT

The Rules of University Conduct (Chapter XLI of the Statutes of the University) provide special disciplinary rules applicable to demonstrations, rallies, picketing, and the circulation of petitions. These rules are designed to protect the rights of free expression through peaceful demonstration while at the same time ensuring the proper functioning of the University and the protection of the rights of those who may be affected by such demonstrations.

The Rules of University Conduct are University-wide and supersede all other rules of any school or division. Minor violations of the Rules of Conduct are referred to the normal disciplinary procedures of each School or Division ("Dean's discipline"). A student who is charged with a serious violation of the Rules has the option of choosing Dean's discipline or a more formal hearing procedure provided in the Rules.

All University faculty, students, and staff are responsible for compliance with the Rules of University Conduct. Copies of the full text are available at the Office of the University Senate, 406 Low Memorial Library, at the Office of Student Information Services, 208 Philosophy, and at the Office of Student Activities, 206 Ferris Booth.

**CODE OF CONDUCT
OF
COLUMBIA UNIVERSITY
SCHOOL OF DENTAL AND ORAL SURGERY**

Preamble

The purpose of this Code of Conduct is to emphasize to all members of the dental school community the importance of maintaining the highest standards of ethical conduct. The philosophy of the School of Dental and Oral Surgery is that the development and maintenance of the highest ethical standards is an integral part of the education of every student and is necessary for entrance into the dental profession.

Article I - Ethical Conduct

The foundation of the Code of Conduct of the School of Dental and Oral Surgery is the belief that the ethical conduct of the dental school community at large is the responsibility of all of its individual members: students, faculty, and the administration.

Article II - Violations of the Code of Conduct

I. Members of the SDOS community are expected to abide by the highest ethical standards and must demonstrate by their conduct that they are suited to the study and practice of dentistry. Specific violations of the Code of Conduct of SDOS shall include, but not be limited to:

- a) Obtaining, receiving, or using or attempting to obtain, receive, or use assistance during an examination or other formal exercise from any source which is not authorized by the faculty. This shall include but not be limited to the copying of answers from another student, communicating with another student in order to obtain such information and using unauthorized notes or devices.
- b) Students' giving or attempting to give unauthorized assistance during an examination or other formal exercise, including, but not limited to, allowing another student to copy from an examination.
- c) Plagiarism within the text of any written paper or presentation.
- d) Obtaining, receiving, or using or attempting to obtain, receive, or use any unauthorized knowledge of examination questions or other exercise.
- e) The presentation for grading of any work or projects which are not exclusively the work of the student(s) being graded.
- f) The willful or reckless misrepresentation or reporting of inaccurate data in any academic, clinical, or research situation.
- g) The misappropriation by any student(s) of supplies/materials which are intended for the use of the class as a whole.
- h) Dealing with a patient(s) and/or a member(s) of the SDOS community in a manner which is inappropriate, unprofessional, unethical, or otherwise not in accordance with the *ADA Principles of Ethics and Code of Professional Conduct* and the *Code of Ethics of the American Dental Hygienist's Association*.
- i) The theft, willful damage, vandalism, or abuse of any possession(s) of a member of the SDOS community or the property of the School.

- j) Any falsification or attempt to falsify grade forms, clinic forms, or patient records.
 - k) Any interference or attempt to interfere with the performance of another student on an examination, formal exercise or in clinical practice.
 - l) The unreported knowledge of any violations as listed above.
2. The responsibilities of the faculty and administration regarding ethical conduct and violations are as follows:
- a) All faculty and administration must attempt to foster a professional atmosphere, to dissuade unethical conduct, and to deal with it appropriately if it does arise.
 - b) All students should receive fair and equal treatment.

Article III - Procedure

At the School of Dental and Oral Surgery, alleged violations of ethical conduct are dealt with in accordance with the procedures described below:

- a) If a member of the SDOS community witnesses a violation, it is recommended that he/she approach the violator first, if possible. If a satisfactory resolution is not obtained, the witness should approach the appropriate faculty member(s) or Course Director, who should then approach the alleged violator(s). If satisfactory resolution of the issue does not occur, the matter will be dealt with by the appropriate Department, Division, or Administration Unit.
- b) Alleged infractions of ethical standards shall be handled by the concerned Course Director, Department, or Division Director, or Administration as soon as possible after a complaint is received.
- c) If the Department, Division, or Administrative Unit determines that a breach of ethical standards may have taken place, the matter will be referred to the appropriate Class Committee for review.
- d) A subcommittee of the Class Committee shall be appointed to investigate the charge and recommend to the Class Committee a course of action. This subcommittee should include one or more students to be selected by the Assistant Dean for Student Affairs from among the students who have been elected to serve on the Ethics Committee. The findings and recommendations of the Class Committee will be transmitted to the administration for disposition. The Class Committee may recommend that the Dean take administrative action, which may include warning, probation, dismissal, or such other action deemed appropriate.
- e) A student may make an appeal of the decision reached, which will be heard by the Dean.
- f) Proof/evidence are necessary, therefore the alleged violator(s) shall be innocent until proven guilty.
- g) All matters will be kept confidential, regardless of the outcome.

Article IV - Distribution and Pledge

1. This Code of Conduct will be distributed to all members of the student body, general faculty, and administration.
2. As members of the SDOS community, all students, faculty, and administrators shall be bound by the principles contained herein.

Adopted by Students and Faculty, May 1987

PROFESSIONAL CONDUCT IN THE SCHOOL OF DENTAL AND ORAL SURGERY

The foundation for professional conduct expectations in the School of Dental and Oral Surgery derives from these tenets:

Columbia University School of Dental and Oral Surgery Policy on Suitability for Dentistry

I. In order to be permitted to continue studies at Columbia University School of Dental and Oral Surgery, students must demonstrate by good judgment, sense of responsibility, sensitivity and compassion for individual needs, and ability to synthesize and apply knowledge, the capability of becoming safe and effective practitioners. The School reserves the right to refuse the degree to any person who in the judgment of the faculty is not suitable for the practice of dentistry.

II. The Faculty of the school believes that so far as possible we have the responsibility to try to protect patients, students, and employees and to protect the educational mission and research programs of the institution from any harm that may come to them because of any action or condition of a student or employee.

III. Potential hazards could arise from an individual being impaired and, therefore, lacking the ability to perform medical, educational, or other professional duties, including impairments deriving from neurological disease or degeneration, emotional or psychological disorders, substance abuse, inappropriate behavior regarded by patients as alarming, threatening, bizarre, hostile, or otherwise inconsistent with the responsibilities and duties of the individual, and finally, behavior that is disruptive to working groups, to patient care, or to the educational process.

IV. The Faculty is aware that the public identification of an individual as a potential hazard to others or to the institution may seriously jeopardize the career of that individual and the individual's relation to other people. The Faculty believes, therefore, that serious effort must be taken to protect the rights of such an individual and to ensure that any findings, recommendations, or actions are firmly grounded in clear evidence.

V. Private acts, conditions, or behaviors of members of the school outside of the immediate institutional context, although not the responsibility of the school, are of legitimate concern to the school in so far as they may imply potential hazard if this individual continues in their role.

These tenets support professional conduct standards which students, faculty, and all staff in the School of Dental and Oral Surgery are expected to observe. The Code of Conduct of the School further delineates these standards. For example, patient-student/doctor confidence, trust, and confidentiality are clear expectations. Behavior unacceptable in the dental professional would therefore include:

- breaches of trust and confidentiality
- actions such as cheating or unauthorized use of materials in academic or preclinical exercises or examinations
- misrepresentations, distortions, or serious omissions in data or reports in research
- abuse, misrepresentation, or other seriously improper conduct in relation to patients or colleagues in clinical training settings

- repeated failures to meet assigned obligations in professional, clinical, or research training programs
- other misconduct, misrepresentation, or failures in personal actions or in meeting obligations which raise serious, unresolved doubts about the integrity of the student in meeting the overall obligations of a professional dental career

Protocol for Addressing Unprofessional Conduct

It is the obligation of a profession to police itself or risk abdication of that privilege to external agencies. The School's Code of Conduct parallels the ADA Code of Conduct and governs these matters.

Instances wherein a student is suspected of behavior inappropriate to the dental profession first should be brought to the attention of that student by the observer. If this is not deemed possible or appropriate, then it should be brought to the proctor, course director, division director, clinical faculty, the Academic Dean, the Dean for Clinical Affairs, or the Dean for Student and Alumni Affairs, depending on the setting in which such incident occurred.

A fact-finding investigation shall ensue, and where evidence of misconduct is determined the protocol outlined in the document Dean's Discipline shall be followed. Subsequent to that process and any subsequent appeals, the Dean of the School has the duty of determining indicated actions wherein a violation of the Code of Conduct or expected professional behavior is determined.

All students are expected to be completely familiar with the School of Dental and Oral Surgery Code of Conduct and the ADA Code of Conduct and are referred to the document Dean's Discipline for further information on due process.

Adapted from *College of Physicians and Surgeons Policies*, September 1994.

CAMPUS SAFETY AND SECURITY

Located in New York City, Columbia University offers the advantages and disadvantages of life in a major metropolitan area, and Columbia has made the safety and well-being of members of its community a top priority. Cooperation with security programs will promote safety on University property. Off campus, care and alertness are required as students, faculty, and staff explore the city's many riches and attractions.

The Columbia University Security Department provides 24-hour security for undergraduate residence halls through security officers and specially trained student attendants. Access to residence halls is controlled by an on-line system linked to student IDs. Security measures vary at graduate dormitories and University-owned apartment buildings. Escort services are available during nighttime hours.

Sound crime prevention techniques are required as students, faculty, and staff navigate the city on foot, on public transportation, or via privately owned transportation. Such techniques also are necessary to safeguard property. The Security Department's manager of investigations follows up on all crime reports and, when appropriate, makes referrals to local police precincts.

The Security Department compiles statistics annually on campus crimes that are reported. The statistics for crimes reported on the Health Sciences campus in 1993: 0 mur-

ders, 6 robberies, 4 aggravated assaults, 23 burglaries, 0 motor vehicle thefts, and 0 forcible and non-forcible sex offenses. The 1993 statistics for the Morningside campus: 0 murders, 5 robberies, 10 aggravated assaults, 87 burglaries, 0 motor vehicle thefts, and 0 forcible and non-forcible sex offenses. In University-owned apartments, there were 0 murders, 26 robberies, 3 aggravated assaults, 52 burglaries, 1 motor vehicle theft, 1 forcible rape, and 0 other forcible and non-forcible sex offenses. No crimes were reported at Baker Field in 1993.

Sexual assault of any type is unacceptable, especially within the University environment, and Columbia University strongly supports all efforts to eliminate its occurrence and discipline offenders. The Student Right-to-Know and Campus Security Act of 1990 was amended to require all colleges and universities to develop and distribute programs, policies, and procedures about rape and other sex offenses, both forcible and non-forcible.

This material summarizes Columbia's annual campus security report. A copy of the full report, "Columbia University Campus Safety and Security," is available on request from admissions offices.

DISABILITY SERVICES

Columbia University is committed to serving the needs of students with disabilities. Services to students with permanent or temporary disabilities are coordinated by University Student Affairs and Disability Services in support of the academic program and standards of the School. All student contact and intervention is handled by the designated liaison officer within the School.

Students must identify themselves to the liaison officer and provide current and appropriate medical or diagnostic documentation before any accommodations can be considered. In cases involving students with learning disabilities, appropriate documentation may be no more than five years old and must include a report summary and complete test battery scores.

To allow sufficient time for review of needs and implementation of accommodations, students with disabilities are encouraged to contact their liaison officer upon acceptance of the School's offer of admission to discuss their needs and plan their academic program.

STATEMENT OF NONDISCRIMINATORY POLICIES

The University is required by certain Federal statutes and administrative regulations to publish the following statements.

Consistent with the requirements of Title IX of the Education Amendments of 1972, as amended, and Part 86 of 45 C.F.R., the University does not discriminate on the basis of sex in the conduct or operation of its education programs or activities (including employment therein and admission thereto). Inquiries concerning the application of Title IX and Part 86 of 45 C.F.R. may be referred to Ms. Beth Wilson, the Assistant Provost for Equal Opportunity and Affirmative Action (402 Low Memorial Library, New York, N.Y. 10027, telephone 212-854-5511), or to the Director, Office for Civil Rights (Region II), 26 Federal Plaza, New York, N.Y. 10007.

Columbia University admits students of any race, color,

national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the University. It does not discriminate on the basis of race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University-administered programs.

Consistent with the requirements of Section 504 of the Rehabilitation Act of 1973, as amended, and Part 84 of 45 C.F.R., the University does not discriminate on the basis of handicap in admission or access to, or employment in, its programs and activities. Section 503 of the Rehabilitation Act of 1973 requires affirmative action to employ and advance in employment qualified handicapped workers.

The University in addition desires to call attention to other laws and regulations that protect employees, students, and applicants.

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving Federal financial assistance. Title VII of the Civil Rights Act of 1964, as amended, prohibits employment discrimination because of race, color, religion, sex, or national origin. Executive Order 11246, as amended, prohibits discrimination in employment because of race, color, religion, sex, or national origin and requires affirmative action to ensure equality of opportunity in all aspects of employment. In addition, New York Human Rights Law, Article 15, Executive Law Section 296 prohibits discrimination in employment because of marital status.

The Equal Pay Act of 1963 prohibits discrimination on the basis of sex in rates of pay. The Age Discrimination in Employment Act of 1967, as amended, prohibits discrimination in employment on the basis of age.

The Columbia University Senate on December 1, 1978, passed a resolution announcing its general educational policy on discrimination which reaffirms the University's commitment to nondiscriminatory policies in the above-mentioned categories, as well as its policy not to discriminate on the basis of sexual orientation.

Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, prohibits job discrimination and requires affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era.

All employees, students, and applicants are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation under any of the foregoing policies and laws.

The University's Office of Equal Opportunity and Affirmative Action has also been designated to coordinate the University's compliance activities under each of the programs referred to above. Any employee who believes that he or she has been denied equal opportunity should contact this office, which will investigate complaints and counsel employees on questions relating to equal opportunity and affirmative action.

DISCRIMINATION GRIEVANCE PROCEDURE

The University's Discrimination Grievance Procedure is available to enrolled students who feel that they have been the victims of sexual harassment or discrimination on the basis of race, religion, national or ethnic origin, sex, sexual

orientation, marital status, age, handicap, or Vietnam Era or qualified special disabled veteran status. A copy of the Procedure is available in the Office of Equal Opportunity and Affirmative Action, 402 Low Memorial Library (854-5511).

A complaint under this procedure is initiated through completion of a Discrimination Complaint Form, also available in the Equal Opportunity Office. Staff in that office will assist in completing the form and also are available for confidential counseling and informal investigation of discrimination claims.

COLUMBIA UNIVERSITY OMBUDS OFFICE

The Ombuds Officer is a neutral complaint-handler who seeks fair and equitable solutions to problems. The Ombuds Office serves the entire Columbia University community. In considering any given instance or concern, the rights of all parties that may be involved, along with the welfare of the University, are taken into account.

The Ombuds Office is a safe and confidential place to voice concerns. No formal permanent records of individual records are kept, except anonymous aggregate statistical data on the categories of complaints or inquiries. The Ombuds Officer will not report the names of callers or visitors or the specific content of problems reported unless permission is granted, or in the very rare instance in which there is a reasonable cause to believe that the safety of the caller or others may be endangered.

Except in emergencies, the Ombuds Officer does not take action or investigate an issue without the permission of the person who introduced the information to the Ombuds Office. The Ombuds Officer will listen, offer information about Columbia University policies and procedures, present a range of options for resolving a problem, or help find ways to convey information while maintaining the confidentiality of the source.

The Ombuds Officer may conduct an informal, impartial investigation or facilitate a resolution upon request. The Ombuds Officer has no power to establish, change, or set aside any University rules or policies. However, the Ombuds Officer is a resource for administrators and, when appropriate, may make recommendations or propose general changes in existing practices to correct problem areas or stimulate discussion of issues affecting the University community.

The Ombuds Office supplements, but does not replace, the existing resources for conflict resolution and fair practice available at Columbia University. The Ombuds Office is independent of existing administrative structures and reports directly to the President of the University.

For further information, contact Marsha Wagner, Ombuds Officer, or Lise Afoy-Campbell, Administrative Assistant, in 659 Schermerhorn Extension; (212) 854-1234; e-mail ombuds@columbia.edu; fax (212) 932-3712.

ACADEMIC PROGRESS

The academic progress of every student is monitored through the system of the four Class Committees. A student must pass every course in the curriculum in each year in order to be advanced to the next year, or at the conclusion of four years of study to receive the Doctor of Dental Surgery degree.

Students are reviewed for their academic progress several times each year, particularly at the conclusion of examinations in order to determine if academic difficulties are being experienced. Recognizing that academic progress is usually the result of individual hard work and preparation, nonetheless, tutorial support is offered through the Academic Success Program. This program is jointly operated with the College of Physicians and Surgeons and utilizes both peers and individuals from preceding classes who have performed extremely well in these courses to tutor students experiencing study problems. In certain courses, Ph.D. candidates may also be available as tutors. Finally, a number of the courses provide remediation through small group review sessions, which are voluntary in nature, and provide the opportunity for discussion, questions, and reinforcement of course material.

The Class Committee chairperson communicates in writing to students who are experiencing academic problems. Students may be categorized as *progressing satisfactorily*, or they may be placed on *monitored status* if they are having difficulties in one or more courses. At the conclusion of the year, when all course performance is reviewed by the Class Committee, a student may be recommended to the Dean to *advance*, to *repeat the entire year*, or occasionally to have the opportunity to perform make-up exercises in one course, in consideration of the total performance. This decision is made at the discretion of the Course Director in consultation with the Class Committee. Each decision is individual and reflects the total of the student's scholarly progress. Class Committee recommendations to the Dean are subject to appeal and to Due Process review by the Dean.

The School of Dental and Oral Surgery reserves the right to dismiss or require the repeat of a year by any student whose overall performance is deemed insufficient by the Class Committee. Thus, a student with poor performance in several courses, yet with no actual course failures, may be dismissed or required to repeat. Students experiencing academic difficulty should, at their earliest opportunity, speak first with the Course Director regarding their performance and remediation, and secondly, with the Assistant Dean for Student and Alumni Affairs regarding tutorial support, personal counseling opportunities, or other related matters.

NOTICE OF OPPORTUNITY TO FILE COMPLAINTS WITH THE COMMISSION ON DENTAL ACCREDITATION

The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeals for individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students.

A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611 or by calling 1-800-621-8099, extension 2719.

Adopted: January 1994

Commission on Dental Accreditation

Protection Against Sexual Harassment

POLICY STATEMENT ON SEXUAL HARASSMENT

Federal Law [Title VII of the Civil Rights Act of 1964] provides that it shall be an unlawful discriminatory practice for any employer, because of the sex of any person, to discharge without just cause, to refuse to hire, or otherwise to discriminate against that person with respect to any matter directly or indirectly related to employment. Harassment of any employee on the basis of sex violates this federal law.

To help clarify what is unlawful sexual harassment the Federal Equal Employment Opportunity Commission has issued Guidelines on the subject. While the EEOC Guidelines apply only to faculty and other employees, the University prohibits sexual harassment of any member of the Columbia community, whether such harassment is aimed at students, faculty, or other employees, and violators will be subject to disciplinary action. Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature will constitute sexual harassment when:

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
2. submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or,
3. such conduct has the purpose or effect of unreasonably interfering with an individual's academic or work performance or creating an intimidating, hostile, or offensive academic or working environment.

Any person who believes that he or she is being sexually harassed should seek a resolution of the problem through discussion with the person directly concerned. If this does not resolve the matter, or if there is a reluctance to deal directly with the person involved, the problem should then be brought to the attention of a member of the University Panel on Sexual Harassment. A list of current panelists is attached. Advice may also be sought from the Office of Equal Opportunity and Affirmative Action (402 Low Library; 854-5511). If these steps have not resolved the problem, the applicable University grievance procedure should be used, including the University Discrimination Grievance Procedure that is available if no other University grievance procedure is specifically applicable. No one at the University may retaliate in any way against a person who makes a claim of sexual harassment.

CHARGE OF THE UNIVERSITY PANEL ON SEXUAL HARASSMENT

The Columbia Panel on Sexual Harassment is composed of trusted, accessible, and sympathetic members of the University community who act as mediators. Their goal is the protection and counseling of any member of the University who is made to feel personally pressured or uncomfortable because of the behavior of another

University member who is in a position of power. Members of the Panel provide a safe, impartial, nonadversarial setting in which the problem can be considered or solved, through confidential counseling and, when requested, mediation between the complainant and the alleged harasser. The Panel thus provides guidance and protection for the accused as well, identifying false or mistaken accusations, misunderstandings, or unconscious behavior. Panel members finally become a link through which the University can take account of, and take appropriate action against, those on campus who are behaving illegally. The Panel on Sexual Harassment is thus a timely, protective, and compassionate arm of the University, one which not only sensitizes and educates the University community, but also demonstrates the University's commitment to fair treatment of all its members.

SEXUAL HARASSMENT COMPLAINT PROCEDURES

A. Going to a Panelist

1. A complainant comes to a Panel member with a complaint, to report an incident, or to seek advice.
2. The Panel member obtains data through discussion with the complainant, but keeps no records.
3. The Panel member selects one of the counseling or mediation options suggested by his or her training.
4. If the case seems serious enough, the Panel member refers it to the Equal Opportunity/Affirmative Action Office.

B. Initiating a Formal Investigation

1. A formal investigation may be initiated in either of the following ways:
 - a. A complainant files a formal grievance under the applicable University grievance procedure. This step may be taken at any time, either with or without consulting a Panel member.[th,ep]
 - b. A Panel member, believing that further action in a particular case might be appropriate, with the permission of the complainant, consults with the director of the EOAA office and the General Counsel or their designees. Consultations among the Panel member, General Counsel, and EOAA office may also occur in a case of multiple complaints.
2. All investigatory or formal actions taken will be conducted by the University and not the Panel.

COLUMBIA UNIVERSITY PANEL ON SEXUAL HARASSMENT

While Panelists are identified by location, school, or administrative area on this list, each of them is in fact available to any member of the Columbia community. Persons who feel uncomfortable speaking with "their" Panelist(s) are encouraged to seek out a Panelist from elsewhere at the University.

MORNINGSIDE PROFESSIONAL SCHOOLS**Mary McLeod***Graduate School of Architecture, Planning, and Preservation*

Associate Professor

306 Buell

854-8262

Ann Bartel*Graduate School of Business*

Professor

710 Uris

854-4419

Stephen H. Unger*School of Engineering and Applied Science**Department of Computer Science*

Professor

505 Computer Science

939-7053

Kenneth Goldstein*Graduate School of Journalism*

Professor

608A Journalism

854-4718, 854-4150

William Young*School of Law*

Professor

8W8 Law

854-2645

Helene Jackson*School of Social Work*

Assistant Professor

602 McVickar

854-7393

ARTS AND SCIENCES*(Columbia College, Graduate School of Arts and Sciences, School of General Studies, School of International and Public Affairs, and School of the Arts)***Padma Desai***Department of Economics*

Professor

1015 International Affairs

854-2266

Kathy Eden*Department of English and Comparative Literature*

Professor

401A Philosophy

854-6432

Larry Engel*School of the Arts**Film Division*

Professor

513 Dodge

854-1681

Eric Foner*Department of History*

DeWitt Clinton Professor of History

620 Fayerweather, Box 16

854-5253

David Helfand*Department of Physics*

Professor of Astronomy

1216 Pupin, Box 33

854-2150

Martha Howell*Department of History*

Professor

612 Fayerweather, Box 22

854-7404

CENTRAL ADMINISTRATION**Joan Turner***School of International and Public Affairs*

Associate Dean

1415 International Affairs

854-2598

Donna Badrig*Columbia College*

Associate Dean

213 Low Library

854-4900

UNIVERSITY LIBRARIES**Angela Giral**

Director, Avery Library

Avery Library

854-3068

LAMONT-DOHERTY EARTH OBSERVATORY**Constance Sancetta**

Senior Research Scientist

204 New Core Lab

Palisades, NY 10964

914-365-8412

NEVIS LABORATORIES**Michael Shaevitz**

Professor of Physics

914-591-8100, Ext. 247

Health Sciences

HEALTH SCIENCES**Jeanette Coy***Harlem Hospital Center*

Administrator for Professional Services

Obstetrics and Gynecology

811 Mlk Pavilion

506 Lenox Avenue

939-4341

Marion Greenup

Health Sciences Administration
Departmental Administrator
Pediatrics
Babies Hospital South 1-104
630 West 168th Street
305-7175

Rae Janet Jacobs-Cohen

School of Nursing
Assistant Professor
617 West 168th Street
222 Georgian Building
305-2809

Debra Kalmuss

School of Public Health
Associate Professor
Center for Population and Family Health
60 Haven Avenue, Level B-2
304-5234

Daniel W. Morrissey

School of Public Health
Assistant Clinical Professor of Public Health
50 Haven Avenue
Bard Hall, Box 227
305-3989

Marlene Moss-Klyvert

School of Dental and Oral Surgery
Associate Professor of Clinical Dentistry
Box 20 Physicians and Surgeons
305-3573

Katherine G. Nickerson

College of Physicians and Surgeons
Assistant Clinical Professor
Atchley Pavilion 221
305-8039

Debra Wolgemuth

College of Physicians and Surgeons
Professor of Genetics
1613 Black Building
305-7900

Academic Calendar

Please contact the Office of Student Affairs for a copy of the most recent Academic Calendar.

MAJOR RELIGIOUS HOLIDAYS

For a statement of University policy regarding religious holidays, see *Registration, Expenses, Financial Aid, and Other Information—Religious Holidays*.

UNIVERSITY HOLIDAYS

University Holidays through January 1, 1997 are listed below.

Labor Day

Monday, September 5, 1994

Election Day

Tuesday, November 8, 1994

Thanksgiving Day

Thursday, November 24, 1994

University Designated Holiday

Friday, November 25, 1994

Christmas Day (Observed)

Monday, December 26, 1994

University Designated Holiday

Tuesday, December 27, 1994

University Designated Holiday

Friday, December 30, 1994

New Year's Day (Observed)

Monday, January 2, 1995

Martin Luther King Jr.'s Birthday (Observed)

Monday, January 16, 1995

Presidents' Day

Monday, February 20, 1995

Memorial Day (Observed)

Monday, May 29, 1995

Independence Day

Tuesday, July 4, 1995

Labor Day

Monday, September 4, 1995

Election Day

Tuesday, November 7, 1995

Thanksgiving Day

Thursday, November 23, 1995

University Designated Holiday

Friday, November 24, 1995

Christmas Day

Monday, December 25, 1995

University Designated Holiday

Tuesday, December 26, 1995

New Year's Day

Monday, January 1, 1996

University Designated Holiday

Tuesday, January 2, 1996

Martin Luther King Jr.'s Birthday (Observed)

Monday, January 15, 1996

Presidents' Day

Monday, February 19, 1996

Memorial Day (Observed)

Monday, May 27, 1996

Independence Day

Thursday, July 4, 1996

Labor Day

Monday, September 2, 1996

Election Day

Tuesday, November 5, 1996

Thanksgiving Day

Thursday, November 28, 1996

University Designated Holiday

Friday, November 29, 1996

University Designated Holiday

Tuesday, December 24, 1996

Christmas Day

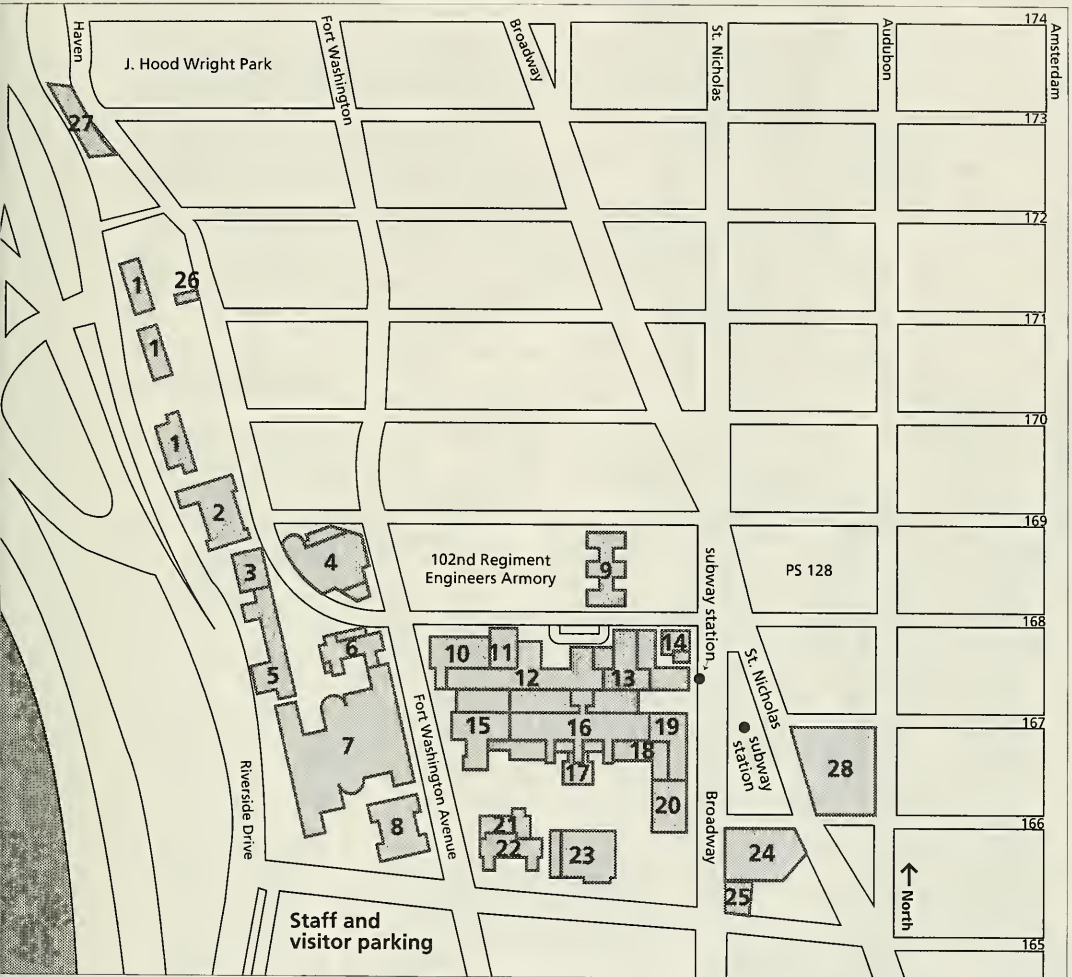
Wednesday, December 25, 1996

University Designated Holiday

Tuesday, December 31, 1996

New Year's Day

Wednesday, January 1, 1997



- | | | |
|---|--|---|
| 1 Bard Haven Towers | 10 William Black Medical Research Building | 19 Babies and Children's Hospital Building, North |
| 2 Bard Hall Medical Student Residence | 11 Alumni Auditorium | 20 Babies and Children's Hospital Building, South |
| 3 The Lawrence C. Kolb Research Building | 12 College of Physicians and Surgeons | 21 Eye Institute Research Laboratories |
| 4 Armand Hammer Health Sciences Center/Augustus C. Long Library | 13 Vanderbilt Clinic/School of Dental and Oral Surgery | 22 The Edward S. Harkness Eye Institute |
| 5 The New York State Psychiatric Institute | 14 School of Public Health | 23 Service Building |
| 6 The Neurological Institute of New York | 15 The Harkness Pavilion | 24 Audubon Biotech Building |
| 7 The Milstein Hospital Building | 16 The Presbyterian Hospital Building | 25 Audubon NYC Building |
| 8 The Dana W. Atchley Pavilion | 17 The Pauline A. Hartford Memorial Chapel | 26 106 Haven-Residence Building |
| 9 School of Nursing/School of Public Health | 18 Radiotherapy Center | 27 154 Haven-Residence Building |
| | | 28 Staff Parking |

Columbia University

The Morningside Campus & Environs



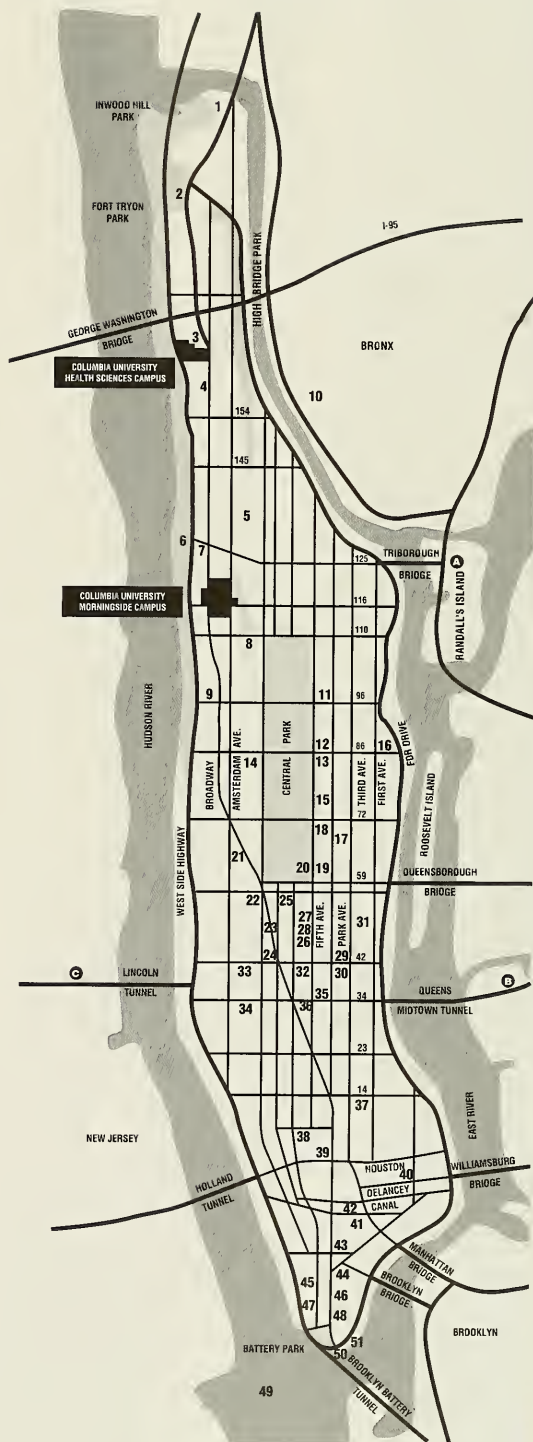
Columbia in New York City

1. Baker Field (Lawrence A. Wien Stadium, Columbia Boat House, and Columbia Tennis Center)
2. The Cloisters
3. Columbia-Presbyterian Medical Center
4. American Geographical Society, The Hispanic Society of America, The American Numismatic Society, The Academy of Arts and Letters
5. City College of New York
6. Grant's Tomb and Riverside Park
7. Riverside Church
8. The Cathedral of St. John the Divine
9. Equity Library Theatre
10. Yankee Stadium
11. The Museum of the City of New York
12. The Guggenheim Museum
13. The Metropolitan Museum of Art
14. The American Museum of Natural History/Hayden Planetarium
15. The Whitney Museum
16. Gracie Mansion
17. Hunter College
18. The Frick Collection
19. Temple Emmanuel
20. Central Park Zoo
21. Lincoln Center for the Performing Arts/The Metropolitan Opera House, Avery Fisher Hall, Alice Tully Hall, New York State Theatre, Vivian Beaumont Theatre, The Juilliard School, The Library and Museum of Performing Arts
22. The New York Coliseum
23. Broadway Theatre District
24. Times Square
25. Carnegie Hall
26. Rockefeller Center/Radio City Music Hall
27. The Museum of Modern Art
28. St. Patrick's Cathedral
29. Grand Central Terminal
30. Chrysler Building
31. The United Nations
32. The New York Public Library
33. Port Authority Bus Terminal
34. Madison Square Garden/Pennsylvania Station
35. Pierpont Morgan Library
36. Empire State Building
37. St. Mark's Church
38. Washington Square Park/Greenwich Village
39. New York University
40. Lower East Side
41. Chinatown
42. Little Italy
43. Centre Street/Courthouse District
44. City Hall
45. Trinity Church
46. Wall Street/Stock Exchange
47. World Trade Center
48. Fraunces Tavern
49. Statue of Liberty
50. Staten Island Ferry
51. South Street Seaport

A To LaGuardia Airport

B To JFK Airport

C To Newark Airport



COLUMBIA UNIVERSITY LIBRARIES



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